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DOD PROFIT POLICY--ITS IMPACT ON FACILITIES CAPITAL INVESTMENTS

by

David John Buck

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Thesis Advisor: Raymond W. Smith

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DoD Profit Policy--Its Impact on Facilities Capital Investments

by

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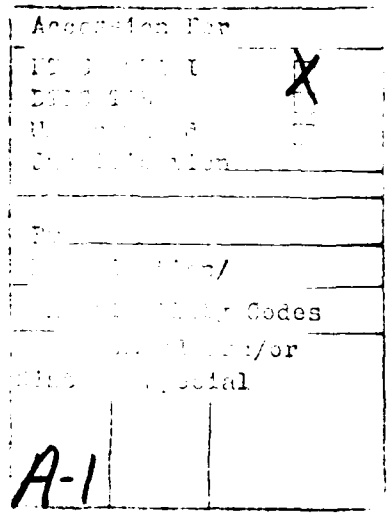

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ABSTRACT

Since the 1970's profit policy has been used as a vehicle to motivate capital investment in productive facilities and equipment. The current policy has increased the factors available for use when determining a profit/fee objective in order to increase this incentive. Defense contractors and Government procurement personnel are interviewed for their perceptions of the effectiveness of the current policy to incentivize capital expenditures in facilities and equipment. The results of the survey showed that: (1) profit policy has been ineffective in incentivizing defense contractors to invest in more productive facilities and equipment; (2) it is not an important factor when deciding on the contractor's capital budget; and (3) profit policy is not being implemented as originally intended. Recommendations include: (1) encouraging greater use of more direct incentives for capital investment; (2) the need for greater accountability of Government procurement personnel on implementation of the policy; and (3) DoD should review and restate the objectives of the policy so the Services have a clear understanding of what is expected and required.

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I. INTRODUCTION

A. GENERAL

The Department of Defense (DoD) has attempted to use profit policy since the 1970's as a method to incentivize defense contractors to make investments in more productive facilities and equipment. This concern over productivity is based in part on the continuing cost growth of major weapon systems and reports of a declining defense industrial base.

Numerous studies have been conducted to determine the effect of profit policy and to make recommendations on improving it. These studies have focused on among other things: (1) the defense industry's profitability as compared to commercial goods manufacturers, (2) impact of profit policy and other government actions on the defense industry, and (3) the need to increase capital investment for productivity gains.

The current DoD or "Final Rule" policy was implemented on 1 August 1987. It was published as Defense Acquisition Circular 86-5 and is now contained in DoD Federal Acquisition Regulation Supplement (DFARS) part 215, subpart 215.9-profit. It provides Government procurement personnel a structured approach, through the use of Weighted Guidelines (WGL), for developing a profit objective on negotiated contracts. The policy's stated purpose is to

provide a consistent manner in which to reward risk, motivate efficient and quality performance and to motivate capital investment in the defense industrial base.

B. OBJECTIVES OF THE RESEARCH

The purpose of this research is to assess the effectiveness of DoD profit policy in motivating capital investment in the defense industry. This assessment is based on interviews with the defense industry and Government procurement personnel. Additionally the factors that determine capital investment and application of policy are addressed.

C. RESEARCH QUESTION

Given the preceding objectives, the following primary research question was posed: Has current DoD profit policy been an incentive for capital investment in the defense industry?

The following secondary research questions are deemed pertinent to this research effort:

1. How important is DoD profit policy in capital investment decision making?
2. What factors other than DoD profit policy affect the defense industry's capital investment decisions?
3. Are current policy guidelines being followed by DoD contracting officers so that contractors can depend upon increased profits if they make productivity enhancing capital expenditures?

D. SCOPE AND LIMITATIONS

The focus of this research is on the ability of the Facilities Capital Employed (FCE) factors in current profit policy to incentivize capital investment. It also evaluates the importance of these factors in the capital investment decision making process and investigates other factors that motivate capital investment in the defense industry.

There have been a wide range of studies and reports done on the topic of profit policy and productivity enhancement of the defense industry. They provide an extreme range of views and opinions on the particular problem which are open to a wide degree of interpretation. Additionally there are numerous factors which can and do effect the defense industry's decision to invest in capital equipment. This thesis is limited mainly to the effect that DoD profit policy and its implementation has had on those decisions and only briefly addresses other factors that have an impact on those decisions.

Another limitation to this research was the inability to gain access to the DD 1547 data base for information on FCE factors applied since current policy implementation. Due to data retrieval problems at OSD the information would not have arrived in a timely manner for sufficient analysis and presentation.

E. METHODOLOGY

The methodology employed in this research consisted of three components: (1) development of a literature base, (2) interviews of defense contractors, and (3) interviews of Government procurement personnel. The literature base was developed using the Defense Technical Information Center, Defense Logistics Studies Information Exchange and the Dudley Knox Library at the Naval Postgraduate School. Telephone interviews were conducted with defense contractors and Government procurement personnel using a standard questionnaire for each respective group. Twenty-five of the top defense contractors, based on prime contract obligations during fiscal year 1988, were asked to participate. Government procurement personnel were selected from the Departments of the Air Force, Army and Navy. The data collected are presented in tables throughout the study.

F. ORGANIZATION OF THE THESIS

This thesis is organized in six chapters. The first chapter is an introduction to the thesis. Chapter II provides a historical perspective of the past policies and events that have lead to current policy. This background account is presented to provide a framework for understanding how and why current policy was developed to incentivize capital investment. The third chapter presents the interview development. Chapter IV presents the

interview questions and responses given by defense contractors and Government procurement personnel. The fifth chapter provides an analysis of the data presented. Chapter VI presents the researcher's findings, conclusions, and recommendations.

II. BACKGROUND

A. INTRODUCTION

A review of past DoD profit policies and their ability to incentivize defense contractors to make capital expenditures should be discussed prior to examining the effectiveness of current policy. This chapter will present DoD's concern relating to the capital investment by defense contractors in more productive cost reducing equipment and the different efforts taken to address the problem. Past and current profit policies are addressed along with the problems and concerns that have given rise to them.

B. PROFIT POLICY BACKGROUND

Concerns over the level of capital investment in the defense industry has been a matter of study for many years. Prior to 1964 profit determination on negotiated contracts was unstructured. Policy required contracting officers to consider various factors when determining a profit objective. These factors included the degree of risk, nature of work to be performed, extent of government assistance, extent of contractor investment, and other performance factors. The policy failed to provide guidance as to the weights that should be accorded to the various

factors and the manner in which these considerations were to be used in a profit objective. [Ref. 1:p. 1071]

In 1964, DoD revised its Profit Policy to a more structured approach based on a study done by the Logistics Management Institute (LMI). This approach was based on Weighted Guidelines (WGL) where specific weights were assigned to a contractor's: [Ref. 2:p. 33]

1. Input to Total Performance.
2. Assumption of Cost Risk.
3. Performance.
4. Other selected factors.

This initial attempt at structuring profit policy received early criticism for its heavy emphasis on estimated cost as a basis for establishing the profit objective and the inadequate consideration given to the financial resources used by contractors. LMI, in a follow-on study done in 1967, found that the WGL actually acted as a negative incentive for contractor investment. This was based in part on the emphasis of cost for determining profit. The study concluded that the WGL method provided incentives for cost escalation and acted as a disincentive for investment in cost reducing plant and equipment [Ref. 2:p. 35].

A General Accounting Office (GAO) report to Congress in 1971 on Defense Profit Policy found that: [Ref. 3:p. 2]

> ... by relating profits to costs, contractors in non-competitive situations are not provided with positive incentives to make investments in equipment that would

> increase efficiency and result in reduced costs, especially where follow-on contracts are involved.

The report also went on to recommend, in broad terms, that profit policy should be revised to include a greater consideration to capital investment.

Responding to the criticism on WGL DoD developed its first policy on contractor capital employed in December 1972. This policy was published in Defense Procurement Circular (DPC) 107. It established a method to base profits on return-on-investment. It provided that 50% of the profit would be based on the contractor's facilities and operating capital investment [Ref 1:p. 1072]. The policy was made optional based on the agreement of the government and contractor. Initially supported by industry and DoD, DPC 107 was found to be too complex and received little use. It was phased out in 1975. [Ref. 2:p. 45]

Even though DPC 107, DOD's Profit on Capital Policy, failed, there was still concern over the disincentives in DoD's profit policy. There was also rising concern in DoD over the apparent erosion of the defense industrial base. This perception was based on the growing necessity for sole-source contracts, increases in production lead time for defense products, more dependency on foreign production of critical components, and insufficient improvement in productivity through investment in plant and equipment [Ref. 4:p. 6].

1. Profit '76

In May 1975 the DoD initiated a major study of profit and its relationship to capital investment and increased productivity. The goal of this 16 month study, known as Profit '76, was to "develop any policy revisions considered necessary to encourage private investment in equipment and the associated reductions in costs." [Ref. 2:p. 8]

Profit '76 was comprehensive and one of the major efforts of its kind. The study analyzed the earnings and investments of over 200 defense contractors and compared them with similar data from commercial industries [Ref. 4:p. 7]. At the same time opinion surveys on profit issues were gathered from Government, industry and financial communities. The key findings of the study were as follows: [Ref. 5:p. xii]

1. The pre-tax return on investment (ROI) for defense business profit centers was higher than comparable durable goods industries.

2. The amount of capital investment per sales was higher for durable goods industries than for defense business centers.

3. The pre-tax return on sales ratio of realized profits was higher for durable goods industries than defense business profit centers.

4. The pre-tax ROS actually realized on government contracts was significantly less (approximately 46 percent) than the profit rate negotiated by contracting officers.

Some of the conclusions from Profit '76 that pertain to this research are: [Ref. 4:p. 8]

1. That government contractors were able to maintain a high return on investment by keeping investment low.
2. DoD was missing productivity gains that could be realized through higher levels of investments.
3. Investments resulting in increased productivity could decrease the cost of production and thereby reduce the cost to the government.

In response to the study DoD revised its profit policy for negotiated contracts.

2. Defense Procurement Circular 76-3

These revisions were promulgated in Defense Procurement Circular (DPC) 76-3 in September 1976. DPC 76-3 made two major changes to DoD profit policy with the hopes of overcoming contractor reluctance to invest in modern facilities and machinery. The first change made the imputed cost of contractors' facility capital investments, as outlined in Cost Accounting Standard 414, an allowable cost on most negotiated contracts. The second change made the level of facility investment a factor in reaching a prenegotiated profit objective under the WGL method [Ref. 4:p. 10]. The revisions are outlined in Table 1.

From the outset of the new policy it was recognized that the relative weight of the contractor's capital investment (10%) was too low and would likely have to be increased in the future. It was felt that these changes would remove the disincentive for industry to make cost-reducing facility

TABLE 1

PROFIT '76 REVISIONS

	Before	After
Contractor effo[illegible] (input to total perf.)	65%	50%
Contractor assumption of cost risk	30	40
Contractor's capital investment	--	10
All other factors	5	*
Totals	100%	100%

* Some of the factors, such as productivity were not eliminated but their precise weighting was indefinite.

Source: [Ref. 1:p. 1072]

investment decisions [Ref. 4:p. 10]. In his statement to the Joint Committee on Defense Production on the purpose of these revisions, the Deputy Secretary of Defense stated: [Ref. 5:p. 9]

> We feel that our new profit policy and the allowance of the imputed cost of capital will help remove obstacles to cost-reducing facility investment decisions by industry. These policy changes are a step in the right direction and should reduce the DOD acquisition cost by improving the viability and productivity of our defense industrial base.

Follow-on analysis of the effects of DPC 76-3 relative to contractor investment in equipment and facilities revealed that contractors had not taken advantage of the investment incentive aspects of the profit policy to increase productivity [Ref. 6:p. 13]. Two additional studies were conducted in 1979 to determine the effects of

the 1976 profit policy change. The GAO and DoD found that the overall level of profit had increased with little indication that contractors had responded positively to upgrading facilities and equipment. An examination of the practical experience with DPC 76-3 revealed that there were four major weaknesses [Ref. 2:p. 42].

1. The return on facilities investment was not adequate to be a positive motivation for contractors to increase their facilities investment.
2. Policy guidance for assigning weight to the contract cost risk factor was not sufficient.
3. There were too many exceptions to a manufacturing oriented profit policy.
4. The relationship between R&D and service contract profit levels was not desirable.

3. Defense Acquisition Circular 76-23

In February 1980 the policy was revised to address most of the weaknesses listed above. DoD promulgated Defense Acquisition Circular (DAC) 76-23 to address these weaknesses. Specifically, the profit factor for capital employed was increased from a range of six to ten percent to a range of 16 to 20 percent. The WGL were modified to provide separate profit weight ranges for manufacturing, R&D and service contracts. Third, the risk factors among contract types were significantly changed to separate factors for cost and multiple incentives [Ref. 5:p. 11]. The intent of the percentage change in facilities investment factor was to place more emphasis on the facilities

investment portion of negotiated profits thereby enticing defense contractors to increase capital investment [Ref. 7:p. 19].

4. Profit '82

In 1982 the Air Force Systems Command initiated a study to examine the continued relevance of the current profit policy in today's business environment and to determine whether the desired objectives underlying the profit policy revisions of DPC 76-3 and DAC 76-23 were achieved [Ref. 5:p. 1]. In its attempt to answer these questions it emulated as closely as possible the events and data used in Profit '76. One of the objectives of Profit '82 directly relates to this research. It is, "has the profit policy stimulated investment in contractor facilities capital within the defense industry." [Ref. 5:p. 1]. Some of the findings relevant to this question and this research are: [Ref. 5:pp. 53-56]

1. By itself, profit will not induce capital investment.
2. The structure of DPC 76-3 did not adequately reward capital investment.
3. The profit policy changes under DAC 76-23 significantly reduced the potential impact of profit on capital investment.
4. Recognition of capital employed profit has not motivated contractor investment.
5. DoD profit policy lacks credibility.

Profit '82 went on to make the following recommendations on capital investment and productivity with respect to profit policy: [Ref. 5:pp. 57-58]

1. DOD must have realistic expectations of the true relationship between profit policy and capital investment.
2. DoD should rescind DAC 76-23.
3. DoD should revitalize the special productivity factor.

Profit '82 also noted that even with the use of a capital facility investment incentive in profit, capital investment on defense contracts as a percentage of total contract costs did not change during the 1977-1981 period [Ref. 5:p. 53].

It should be noted that both DPC 76-3 and DAC 76-23 used cost as a primary basis for determining profits. In fact, after DAC 76-23, cost still determined 72 percent of the total profit objective [Ref. 8:p. 17]. Even with the additional emphasis on facilities capital employed put in place by DAC 76-23 little additional increase in capital investment in plant and equipment was occurring. With the continued emphasis on cost based pricing for government contracts, any productivity cost reductions implemented would result in lower costs to the contractor. This equated to lower profits as well since profit was determined as a percentage of cost. Therefore the only direct result contractors could expect from capital improvement investments was reduced profits [Ref. 9:pp. 5-11].

5. Defense Financial and Investment Review (DFAIR)

Still not satisfied with its profit policy the Deputy Secretary of Defense established the Defense Financial and Investment Review (DFAIR) in December 1983. This full scale study was to review contract pricing, financing and profit (markup) policies and to make recommendations to provide for appropriate integration of the policies [Ref. 10:p. i]. DFAIR was comparable in scope to Profit '76 and conducted a comprehensive study with the support of selected government officials, representatives of industry and professional associations, CPA firms, the Logistics Management Institute and the Conference Board [Ref. 1:p. 1073]. A distinctive aspect of the DFAIR report was its recognition of the interrelationships among profit, financing and other factors. It provided a more complete picture of profit policy. DFAIR's overall conclusion was: [Ref. 10:p. E-1]

> ...that current contract pricing, financing, and markup policies are balanced economically, are protecting the interests of the taxpayer, and are enabling U.S. industry to achieve an equitable return for its involvement in defense business. Analysis of industry financial and investment trends indicates that the goals of many of the previous policy changes are being realized, although there are a number of refinements and improvements which need to be made.

Of particular interest to this research are the four specific conclusions DFAIR made on capital investment and efficiency improvements. It reported that though significant capital investment had been made by defense

contractors the rate of change had been driven by factors other than DoD profit policy. It also stated that current profit policy is indifferent to productivity of capital investments and that in and of itself is insufficient to bring about productivity-enhancing improvements. [Ref. 10:p. E-2]

DFAIR also recommended that overall policy should be simplified and better integrated with financing policy and length of contract performance. It also stated that modifications should be made to yield profit results that average .5 to 1 point lower than results achieved under DAC 76-23 [Ref. 1:p. 1074]. Like other studies done before, it recommended that increased emphasis should be placed on investment and that facilities capital employed should be based on productivity and risk of assets. It also recommended that efforts to motivate contractors to acquire productivity enhancing capital and to make other productivity changes should be pursued on an extra contractual, plant-wide basis [Ref. 10:pp. ix, 6-7].

As a result of the DFAIR study DoD issued a revised profit policy adopting many of the recommendations in September 1986. While this proposal was undergoing review, its implementation was mandated in the continuing appropriation resolution P.L. 99-50 on October 18, 1986. The statutory requirement is quoted below: [Ref. 1:p. 1070]

> Provided that for solicitations issued after the effective date of this Act which require price negotiation, contracts may only be awarded if such negotiation is based on new profit calculation procedures which provide for increased emphasis on facilities capital employed and contractor risk and which procedures do not provide an explicit fixed rate for working capital and which do not include profit based on specific individual elements of contract cost.

The final rule, DoD Profit Policy (DAC 86-5), DFARS subpart 215.9, was issued on 1 August 1987 and is the current policy.

C. CURRENT PROFIT POLICY

The current profit policy made several substantial changes from earlier policy. One major change was to remove specific elements of contract cost as a determinate of profit. It moved to try to provide a consistent manner for rewarding risk. For the first time, a working capital adjustment in profit determinations was included.

Of particular interest to this research is that incentives on facilities capital employed are now split into two categories: buildings and equipment. Land would no longer receive any risk markup. This was accomplished to discriminate between assets which are likely to be more productivity enhancing from those that are not [Ref. 10:p.ix, 11]. Markups for these categories are ten to 20 percent for buildings and 20 to 50 percent for equipment. The policy does recognize that the methods used to allocate facilities capital employed may produce disproportionate

allocations to research and development and service type contracts. In such cases the government contracting officer is advised to use alternate values.

DoD again is trying to encourage and reward aggressive capital investment in facilities that benefit DoD by substantially increasing the factors assigned to facilities capital employed (FCE). Table 2 reviews FCE incentives initiated by DoD Profit Policy.

TABLE 2

FACILITIES CAPITAL EMPLOYED INCENTIVES

	WGL/1964	DPC 76-3	DAC 76-23		DAC 86-5	
Markup Category	All Contracts	All Contracts	Manf.	R&D/Ser.	Manf.	R&D/Ser.
Land	0%	6-10%	16-20%	0%	0%	0%
Buildings	0%	6-10%	16-20%	0%	10-20%	0-10%
Facilities	0%	6-10%	16-20%	0%	20-50%	15-25%

Source: [Refs. 1:p. 1082; 10:p. v-17]

The current DoD Profit Policy is attached as Appendix A.

D. POST DFAIR STUDIES

The following studies have continued the debate on what is an appropriate profit policy. They also address, to some extent, the ability to motivate capital investment.

1. GAO Assessment of the DFAIR Study

In December 1986 the GAO released its assessment of DoD's DFAIR study. This study was prepared at the request of House and Senate Congressional Committees. It requested an evaluation of the validity of DFAIR'S findings and appropriateness of its recommendations.

The GAO agreed that the overall study provided a good basis for evaluating DoD profit policy. It also agreed that the interrelationship between contract pricing, financing and profit policy should be examined. However, because of what GAO considered major flaws in the study, it concluded that the DFAIR recommendations were not based on adequate analysis. It states: [Ref. 11:p. 56]

> ...We believe the report inaccurately portrays the comparative profitability of defense firms, understates contractor profit objectives under DFAIR's proposed weighted guidelines policy, and understates contractors' contract financing requirements.

It goes on to recommend that DFAIR should not be used for developing a profit policy.

This recommendation was based in part on GAO's disagreement with DFAIR's use of progress payments in the contractors' asset base when determining ROA and the development of its own definition of economic profit. The GAO also concluded that the one percent reduction in profit objective, from 12.3 to 11.5 percent, sought by DFAIR would not be achieved, but in fact could increase to as much as 12.7 percent. [Ref. 11:p. 66]

The DoD recognized that there will be continuing differences of opinion when measuring profitability. However, it felt that this difference of opinion should not be the basis for delaying needed reform.

One finding that relates to this research was the DFAIR analysis of contractor capital investment. It states: [Ref. 11:p. 54]

> Relying on two measures of investment, we conclude that although defense contractor investment has increased over the period 1974-1983, it has lagged behind the corresponding rate of increase for non-defense firms, therefore, defense firms continue to exhibit low relative investment compared with non-defense firms, and the gap appears to be widening. This contradicts DFAIR's suggestion that the gap is narrowing. Moreover, as the percentage of a firm's total sales represented by defense increases, its relative investment declines.

2. The MAC Study

The defense industry, concerned with the cumulative impact of legislative and regulatory changes that had taken place between 1984-1987, commissioned the MAC group to perform an analysis of the impact of these changes on the defense industry. This study, The Impact on Defense Industrial Capability of Changes in Procurement and Tax Policy, 1984-1987, is commonly referred to as the MAC study. Its purpose was to analyze the combined impact of the changes in the context of defense procurement risks and returns, and the implications for our national defense [Ref. 12:p. 1].

The report focused on six categories of change in tax law and DoD policies and applied them to nine existing programs. It then went on to assess the impact of these changes in the programs. The study's findings related to this research included: [Ref. 12:pp. 2-4]

1. The return on investment on the programs analyzed would have been less than the return necessary to preserve shareholder value...

2. Profits will be substantially reduced-by an average of 23 percent on the companies' defense business.

3. Companies will be forced to borrow heavily, but the additional financing required will, for some companies, likely exceed that which can be borrowed.

4. As companies feel the squeeze on available capital, they will be forced to:

   ...Reduce investment needed for productivity enhancement and modernization....

The study goes on to report that CEOs faced with tight funds would be required to cut back on capital investment. Something that is directly opposite of what Congress and DoD are trying to incentivize. It states: [Ref. 12:p. 35]

> The total capital invested by the industry (for defense and commercial purposes) is large relative to the cash flow generated by its profits...If income were to decline, and facing unreceptive capital markets, the industry could look to reduced capital expenditures to help close the gap. If defense capital expenditures are projected to result in higher risk, lower returns, they will suffer more than commercial investment.

The study goes on to conclude that a more coordinated approach to changes in policy needs to occur with some form of assessment of the policy's effects before it is implemented. It also charges Congress and DoD to

develop a clearer plan of what the defense industry should be in the future so that procurement policies can be tested against their requirements. [Ref. 12:pp. 43-44]

3. Navy Studies

The Navy has sponsored a report from RRG Associates entitled Financial Analysis of Major Defense Contractors, since 1984. Prepared annually, its approach is to analyze individual companies in detail by using published annual financial and Security Exchange Commission 10K reports of the companies studied. The study focuses on the relative profitability and reinvestment rates of segments that do business with the U.S. Government and for segments that sell to Commercial customers. [Ref. 13:p. 1]

These studies have concluded that the defense segments of the selected defense industry companies were less profitable than the commercial segments from 1977 through 1980 and have been relatively more profitable than these segments since then. They have also concluded that from 1979 through 1982 and from 1985 through 1987 both commercial corporations and the commercial segments of the defense companies had a greater relative rate of reinvestment in facilities and equipment. [Ref. 13:pp. 25,30]

E. PRESENT CONCERNS

The ability of profit policy to incentivize capital investment is still a question. The studies cited in this research all mentioned that the incentive built into the policy did little to increase the capital investment of defense contractors. This trend seems to be continuing with this current policy. The Navy in an analysis of its FY 88 contract actions found that there was no indication of major increases in investments by its defense contractors [Ref. 14:p. 1].

F. SUMMARY

Profit policy has been a method used by DoD to incentivize defense contractors in making investments in capital facilities. A primary objective of Profit '76, DPC 76-3, DAC 76-23 and to some extent DFAIR and DAC 86-5 was to achieve cost reductions through increased capital investment by modifying profit policy to incentivize capital investment.

It is important to understand the policy, its development and current position to better analyze the effects of current policy.

The next chapter will provide information on the background and development of the surveys and interviews conducted for this research.

III. INTERVIEW DEVELOPMENT

A. INTRODUCTION

The previous chapter introduced how DoD has attempted to motivate capital investment through the use of profit policy. As each major policy review was undertaken, a larger percentage of profit on negotiated contracts was based on facilities capital employed (FCE). Current DoD profit policy has again increased the emphasis on FCE to encourage capital investment. A review of the literature indicates that previous attempts to use profit policy as a means to incentivize capital investment have not been successful. In an attempt to determine whether current profit policy has been able to motivate capital investment, interviews of defense contractors and Government procurement personnel were undertaken.

B. INTERVIEW BACKGROUND

The interviews were used to determine if current DoD profit policy has acted as an incentive for capital investment in the defense industry. To do this the researcher interviewed defense industry personnel, the people affected by current policy, and government procurement personnel, the implementors of the policy. Interviews were conducted using a standard set of questions

tailored for each group. The defense industry questionnaire is in Appendix B and the Government procurement personnel questionnaire is in Appendix C.

Interview questions were developed from a review of available literature, Profit '76, DFAIR, previous profit policy, FCE, and thesis studies.

Telephone interviews were conducted with both groups. To encourage frank and open discussion all interviews were conducted on a non-attribution basis.

C. DEFENSE INDUSTRY INTERVIEW DEVELOPMENT

Twenty-five of the top defense firms were asked to participate in this research. The firms chosen were the top 25 by total dollar value of prime contract obligations awarded by the military Services or DoD in 1988. A list of the companies is in Appendix D.

The researcher interviewed top managers at corporate headquarters or the company's prime defense division who are involved in the capital investment decision making process. This provided the researcher a better understanding of how capital investment decisions were made and how DoD profit policy affects these decisions. The objective of the interview was to ask questions which would answer the primary and secondary questions of this thesis from the defense contractors view. These are:

1. Has current DoD profit policy been an incentive for capital investment?

2. How important is DoD profit policy in capital investment decision making?

3. What factors other than DoD profit policy affect capital investment decisions?

A standard questionnaire was sent to participating defense contractors. A follow-up telephone interview was than conducted to obtain views and comments in the following areas:

1. DoD profit policy as an incentive for capital investment.

2. Company changes to adopt current profit policy.

3. Defense contractor criteria/factors considered for capital investment in defense and commercial ventures.

4. Defense contractor profit/fee objectives on negotiated contracts.

5. Government procurement personnel use of and recommended changes to profit policy.

The initial questions in the questionnaire helped the researcher to get a general impression on how current policy has been perceived. Other questions were used to determine the ongoing need for capital investment and the decision making process that is used. Questions asking to compare capital investment decisions for defense work and commercial work were also asked to determine the differences, if any, in this process. Finally, questions also addressed how defense contractors determine profit objectives, the use of WGL and any need for improvement to profit policy.

The questions asked and a summary of Defense contractors responses are included in the following chapter.

D. GOVERNMENT PROCUREMENT PERSONNEL INTERVIEW DEVELOPMENT

Fifty Government procurement personnel were interviewed to obtain a better understanding of how current profit policy was being applied. This researcher targeted Procuring Contracting Officers (PCOs) and contract negotiators because of their direct involvement in contract negotiations and application of DoD profit policy. Personnel selected were from the Services' major buying commands and involved in major weapon systems procurement programs. A list of the commands contacted is provided in Appendix E.

A standard questionnaire was used for the interview. The questions were in a survey format along the lines of the DFAIR and other previous studies. This interview was more structured than the one used for industry, so a more quantitative approach could be used to evaluate the responses. Comments were also solicited by the researcher so a more complete picture of how policy is viewed and applied by government procurement personnel could be obtained. It is also the researcher's view that by using a telephone interview a better response would be received than by using a generically mailed survey sent to the major buying commands.

The interview was structured around the following areas:

1. Determination of contractors' experience and average dollar size of contracts worked with.

2. Guidance obtained and understanding of DoD's Profit Policy.

3. Application of profit policy in regards to FCE investment and ability of WGL to incentivize capital investment.

4. Perception of how profit policy is being applied.

5. Recommendations to better motivate capital investment.

The questions asked were not as open-ended as the ones addressed to industry, however they still allowed for issues and problems to be addressed and entered into the discussion.

E. SUMMARY

This chapter provided an overview of the background and development of the interviews and questions used to accomplish this research.

The next chapter will present the data collected from the interviews conducted.

IV. DATA PRESENTATION

A. INTRODUCTION

One objective of this research was to assess the opinion of both defense contractors and Government procurement personnel on the ability of current DoD profit policy to incentivize capital investment. This chapter presents the data and responses collected from the interviews conducted. Defense contractor responses will be addressed first.

B. DEFENSE CONTRACTORS

Twenty-three of 25 defense contractors contacted agreed to participate in this survey. Of the 23, two companies did not answer all the questions. One provided a statement on its position of profit policy. The other company's divisions were so diverse (more commercial than military oriented) that they believed they could not provide an adequate response to the questionnaire. The remainder of this section is divided into three subsections. These subsections will address: (1) profit policy as an incentive for capital investment, (2) the ongoing need for capital investment and related decisions, and (3) profit and WGL application.

1. Profit Policy as an Incentive

The first three questions asked the respondents their view of DoD's Profit Policy as an incentive for making capital investments.

Question 1. Does current DoD profit policy provide adequate incentive for capital expenditures on equipment and facilities?

Eighteen firms responded that profit policy was not an adequate incentive. Four other firms stated it provided indirect or little incentive for capital expenditures. A majority of comments fell into the following categories:

1. Profit policy doesn't provide the necessary returns. Motivation is an adequate ROI or internal rate of return (IRR).

2. Competition and the need to remain cost competitive was more of an incentive.

3. The company's financial health, cash flow and ability to finance capital investments was the major consideration for investment.

4. The greater the stability of a program the greater the incentive was to invest.

The following comments were made by a smaller number of respondents from the same group.

1. A majority of the company's defense business was competitive in nature and therefore profit policy played an insignificant role, if any in determining capital investment decisions.

2. The declining DoD budget has created an atmosphere where the pressure is to reduce capital expenditures not increase them.

The contractors who responded that it provides indirect incentive stated:

1. Profit policy helps support a decision if all other decision categories are equal.

2. Profit policy will only work as an effective incentive if it is consistent and co-ordinated with other acquisition policies.

Question 2. Is profit policy the appropriate tool for incentivizing capital investment?

The majority of respondents stated that profit policy is only one of a number of tools that should be used to incentivize capital investment. Other ways to incentivize were:

1. The need for greater program stability.

2. Multi-year contracting.

3. By providing an integrated financial package to include progress payments, taxes, and reasonable cost sharing.

4. To expand the limits of current policy and integrate it with other programs such as the Industrial Modernization Incentives Program (IMIP).

The few contractors who believed it was not an appropriate tool made the following comments:

1. Specific programs and contracts were needed to incentivize capital investment.

2. IMIP was a better tool for incentives. Unfortunately it too had too many bureaucratic encumbrances and road blocks to make it effective.

Question three was developed to determine if companies had changed or adopted company policy to try to benefit from current profit policy.

Question 3. Have there been any changes in company policy to benefit from the higher values now applied to facilities capital employed?

All contractors responded that there had been no change to policy. The opinions stated were:

1. Increases in FCE rates had made no changes in the company's capital investment and budget planning.
2. That the current high rates of capital investment in the company were not due to any changes in profit policy.
3. Nobody in the company pays any attention to the detailed formula in profit policy.

Only one company, highly dependent on defense contracts, stated that while there had been no formal changes, there may have been subtle changes in the outlook of management concerned with evaluating and approving requests for capital expenditures.

2. Capital Investment Decisions

The next four questions address the industry's need for capital investment, the factors involved in deciding upon investment decisions and the differences if any between defense and commercial segments.

Question 4. Are there opportunities or needs to make investment decisions at this time?

All contractors stated the need for continued capital investment. The requirements centered around the company remaining a qualified and competitive contractor. Companies were selective when making capital decisions because of declining markets, limited funds for capital investment, stability of DoD programs and ability to successfully compete in new programs. When asked to rank

capital expenditure criteria, new programs or developing programs to expand new business, contractual requirements for existing programs, and environmental requirements were ranked above increased productivity (cost related) or contract schedule risk reduction programs.

To address the factors or criteria used when making capital expenditures on facilities and equipment the following two questions were asked.

Question 5. For defense contracts, what criteria/factors does your company consider prior to making capital expenditures in facilities and equipment?

Question 6. What differences, if any, are there in capital investment decisions between defense and commercial segments?

There was a wide range of answers to question number five. Responses are divided into two areas, financial and managerial analysis of capital expenditures.

The following tools were used in financial analysis:

1. Discounted cash flow analysis using either IRR or net present value (NPV) criteria.
2. Overall ROA employed for a program.
3. Return on Investment measured against expected risk.
4. Some companies used expected pay back periods of two to three years to examine capital expenditures.

The following factors were considered when making a managerial analysis:

1. Program requirements, stability and risk.
2. Measurability of cost effectiveness of new equipment.

3. Will additional investment make the company more competitive.

4. Contract share arrangements and the potential for increased profits due to lower cost performances.

5. Extent and availability of existing capital.

6. Does capital support existing and long term direction of company.

There was little difference between criteria for capital investment decisions between defense and commercial segments. A large majority responded that corporate policy made no distinction between capital investment decisions between the two segments. The same financial as well as managerial analysis was used. In a number of responses the criteria of program stability and risk were considered to be more negative a factor in defense programs. Also most commercial and defense capital investments competed directly against one another for the capital budget. Defense programs that had lower returns and increased risk had a greater probability of falling below the cut line in periods of limited capital availability.

Question 7. How important is DoD Profit Policy as a factor in deciding on expenditures on capital investment?

Again all the contractors agreed that DoD Profit Policy was not an important factor when deciding on expenditures on capital equipment. More than 50 percent responded that it was not considered at all. The remainder

responded that it was not an important factor. Sample responses included:

1. Profit policy is not considered as a deciding factor in determining capital investment decision.
2. It has virtually no direct impact on the decision.
3. Profit Policy volatility reduces its influence in long term decision making.

Though all agreed it was not a deciding factor a minority held that profit policy did play a secondary although an essential role, in that it does provide some additional incentive. Other responses were that it could be important in an overall sense if interrelated with contract type and financing policy.

3. Profit Policy and WGL Application

The final set of questions were directed at how companies substantiate profit or fee objectives, their opinions on how government procurement personnel apply policy and any changes that can be made to modify policy.

Question 8. Does your company use DoD's weighted guidelines to substantiate your profit/fee objectives on negotiated contracts? If not, what determines negotiated profit/fee levels?

All companies responded that they use WGL as a tool to substantiate or confirm their profit/fee objectives on negotiated contracts. Minimum and maximum ranges were calculated so they had an idea of the profit range available during negotiations. It also helped to identify Government negotiators that were attempting to negotiate a profit/fee

level below what the policy recommends. The respondents stated that the primary consideration was subjective; what price it will take to win the award. When spare parts or follow-on awards were negotiated, company policy and market expectations of profitability were more of a consideration.

When attempting to increase or justify profit/fee levels, companies used technical, cost, and schedule risk factors to substantiate their requirements. Past performance and capital investment were also used.

Question 9. How can profit policy, in particular the weighted guidelines, be changed/modified to provide an incentive for investing in capital facilities and equipment?

The responses to this question were varied. The number of responses recommending a change or abandonment of the policy exceeded the responses on requiring little if any change. The responses centered around change are:

1. Adjust total profit levels so ROA is sufficient to merit continued investment.
2. Change the base for determining FCE for the specific contract and increase its weight.
3. Change FCE from labor hours association to one more related to equipment/facility usage.
4. FCE ranges need to be increased. An incentive for acquiring land for new facilities should be added.
5. Increase all ranges, current policy hasn't produced results intended.

Responses that dealt with total revision of policy include:

1. A more direct link with other financing requirements such as progress payments, cost sharing, tax incentives and contract financing is needed.

2. No amount of tinkering with WGL by changing the importance of the different elements will have any effect on capital investment without changing the total amount of profit markup.

3. Profit policy has evolved into an overly-detailed numbers game with no view toward the "big picture."

4. New programs are not yielding adequate rates of return for industry to meet their cost of capital.

The minority of responses that felt current policy was an adequate process commented:

1. Profit policy does not need to change. There needs to be a greater consistency among financing policies so one does not take away the incentive the other provides.

2. Implementation is inconsistent among the Services and contracting officers.

Question 10. In your opinion, are Government negotiators applying the weighted guidelines factors to facilities capital employed in accordance with DoD profit policy?

Of the respondents 41 percent believed policy was being applied correctly, 27 percent disagreed, 23 percent stated application was inconsistent and nine percent did not know. The respondents who agreed indicated that Government negotiators were making an honest effort to work within the policy. However they felt that most did not go beyond the averages as used in the policy.

The negative comments received were:

1. WGL were an after-the-fact exercise done after price had been negotiated.

2. Profit/fee levels started with in negotiations were arbitrary. Contracting officers were trying to negotiate the lowest profit/fee possible.

3. Negotiators used preconceived limits such as past history on treasury rates and would not go above but would go below them.

The respondents who perceived inconsistent use of policy commented:

1. WGL were used when only a lower profit level was dictated. WGL requiring a higher profit level were often not used.

2. There is no consistent application of DoD policy across the military Services and their commands with which we do business.

The last question in the survey was used as a recap to help repeat the major influences that go into capital investment decisions.

Question 11. Has DoD's decision to emphasize investment in facilities capital employed influenced your company's decision to invest in capital facilities and equipment?

Twenty companies responded no and listed the same responses to question three. These comments were:

1. FCE was not an incentive.

2. The company will invest only when adequate returns can be demonstrated.

3. Competition and the need to invest to survive drove investment.

4. The company will invest for the facilities and equipment to do the job.

The minority responded:

1. Increased emphasis made capital investment more attractive, however the benefits are offset by lower progress payment rates and increased cost sharing.

2. Yes there had been an influence but not from a profit policy angle. The CAS cost of money factor has produced an increase in contract revenue and is helping to provide the cash to invest.

C. GOVERNMENT PROCUREMENT PERSONNEL

Data were collected by interviewing 50 Government procurement personnel by telephone. The personnel interviewed were selected from various major buying commands representing the different Services. This provided responses from a cross section of the Services buying community. The purpose of these interviews was to gather information representing procurement personnel perspective of profit policy and how it is applied in negotiated awards. Demographic data will be presented first. Comments or observations listed in the profit policy subsection have been consolidated by the researcher.

1. Demographic Data

The first question aided the researcher in identifying those personnel who participated in the survey. The breakdown is shown in Table 3.

Questions two and three were used to get a better breakdown of the personnel interviewed in terms of years experience in defense contracting and average dollar size contracts handled. Table 4 provides a summary of the experience level while Table 5 provides a breakout of the average dollar value of contracts handled.

TABLE 3

POSITION OF PERSONNEL INTERVIEWED

Position	Number
PCO	43
Contract Negotiator	7
Total	50

Source: All tables were developed by the researcher unless otherwise noted.

TABLE 4

YEARS OF DEFENSE CONTRACTING EXPERIENCE

Years Experience	Number
2-5	5
6-10	16
11-20	25
Over 20	4
Total	50

TABLE 5

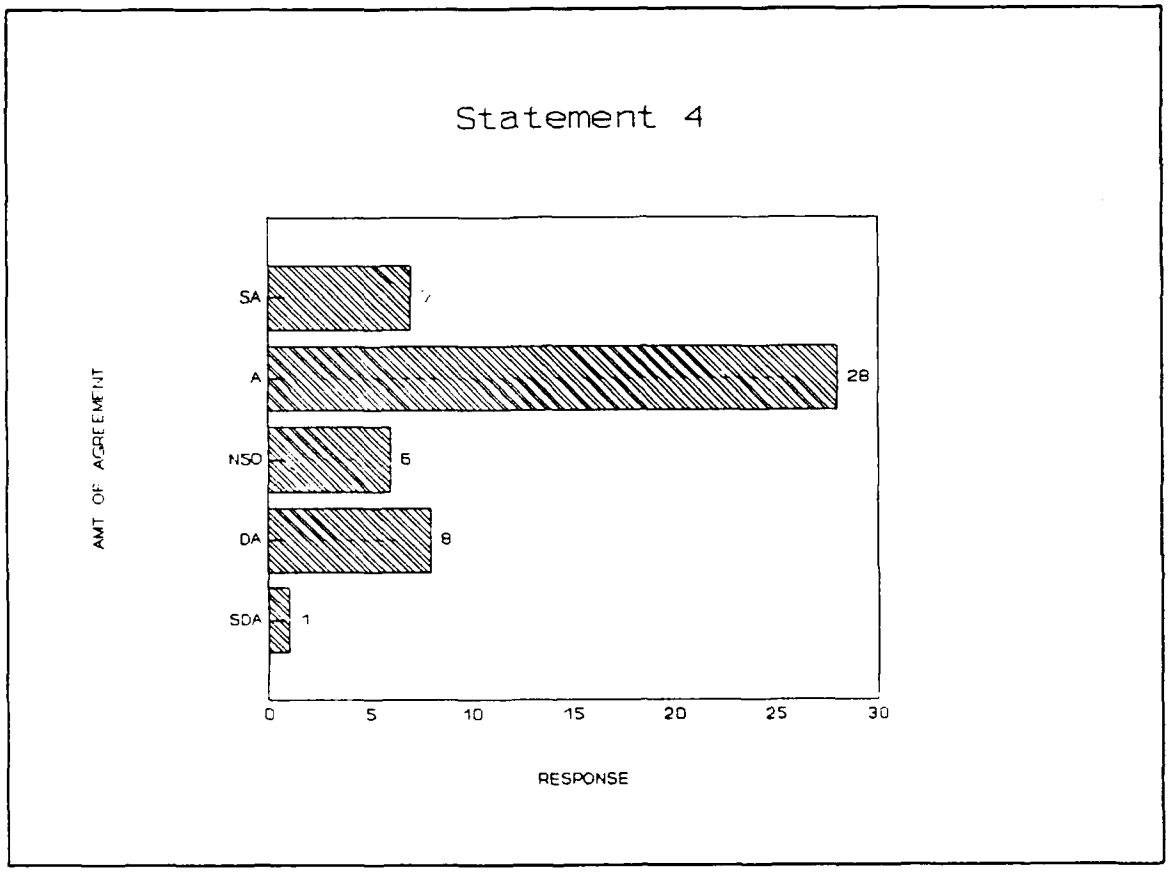
AVERAGE DOLLAR VALUE OF CONTRACTS

Avg Dollar Value Cont.	Number
Less than 1 Million	2
1 to 25 million	5
26 to 50 million	11
51 to 100 million	6
Over 100 million	26
Total	50

2. Profit Policy Statements and Questions

Statement 4. Guidance on the use and application of DoD Profit is clear and understandable.

Figure 1 is a distribution of responses for statement four.



SA = Strongly Agree; A = Agree; NSO = No Strong Opinion; DA = disagree; SDA = Strongly Disagree.

Figure 1. Statement 4 Responses

When asked to state their agreement or disagreement on whether or not policy guidance is clear and understandable, a majority (70 percent) agreed with the statement. Only 18 percent felt that the policy was not clear while 12 percent had no strong opinion. The statements made by respondents in the majority indicated that the guidance allowed for flexibility and judgment. Interviewees who disagreed responded that:

1. There was room for clarification especially in FCE guidelines.
2. Intent and mechanics were good; however reasoning behind the instructions was not understandable.
3. Guidance was too general.

Statement 5. Contracting Officers have a good understanding of how to apply the weighted guidelines.

Figure 2 is a distribution of the responses to statement five.

A majority of respondents (70 percent) agreed with the statement. The few responses received indicated that there was still some misunderstanding of when to apply and how to apply the guidelines but in general most felt comfortable with their understanding of how to apply WGL. Of the 18 percent who disagreed and 12 percent who stated no strong opinion, one response was common to both groups. It was that contracting officers had become too reliant and in some cases abdicated their responsibility or had became too dependent on pricing analysts.

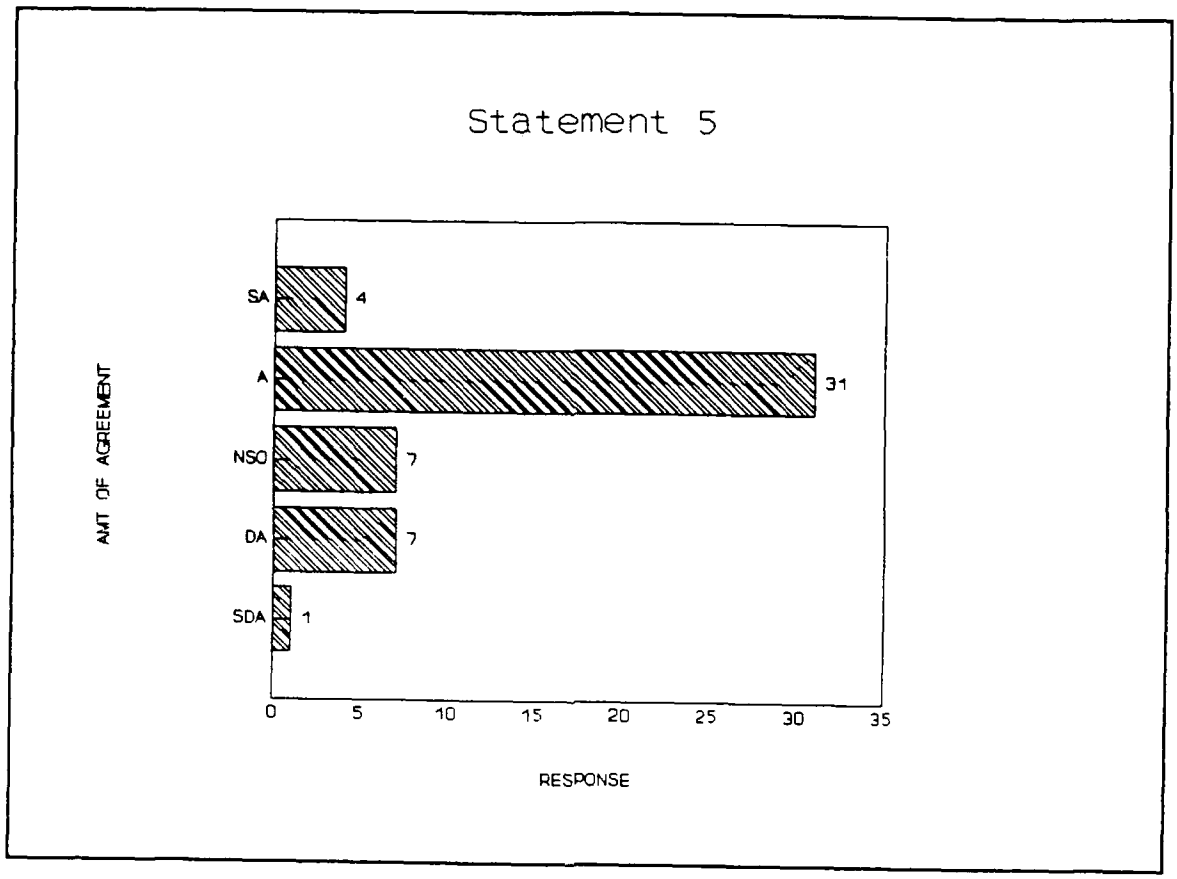


Figure 2. Statement 5 Responses

Statement 6. Contracting Officers have adequate information available to justify higher or lower rates when determining the weighted guidelines facilities capital employed factors.

Figure 3 is a distribution of the responses to statement six.

A majority (58 percent) of the respondents agreed that adequate information was available for decisions on FCE factors. Comments from the respondents were:

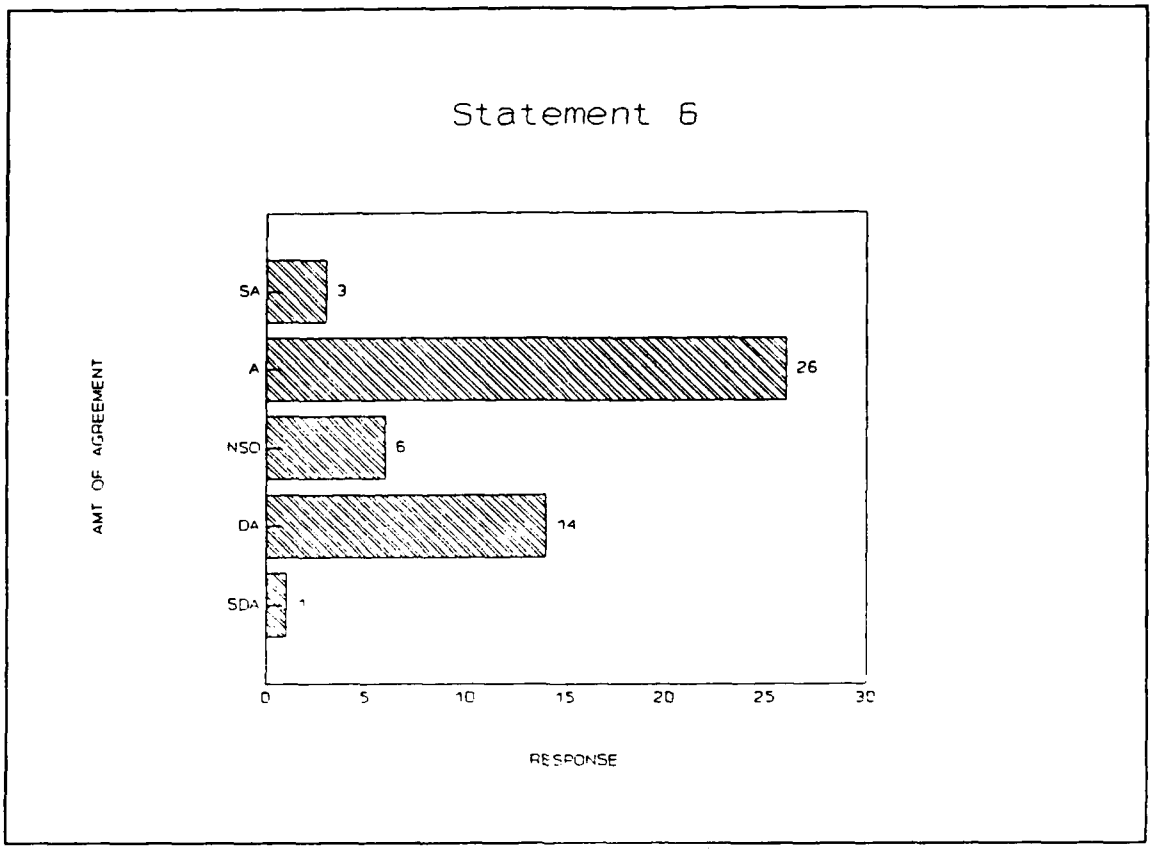


Figure 3. Statement 6 Responses

1. Information received was mostly from Defense Contract Administration Service (DCAS) or Service Plant Representative Office (PRO) organizations. Contractors also provided information.

2. Information is available if the Contracting Officer is willing to take the time to gather it.

The percentage that disagreed (30 percent) had the following responses:

1. Information on what was going on in a facility was not always available.

2. There was no way to measure effectiveness or make comparisons when deciding on whether to assign a higher than average weight.

3. The information on smaller contractors was not always available.

4. Contracting officers have too large a workload to adequately research information.

When respondents were asked how often they justified using other than average factors in FCE the majority who responded stated they very rarely if ever give more than the normal rate.

Statement 7. The weighted guidelines factors for facilities capital employed are sufficient in providing an incentive for capital investment.

Figure 4 is a distribution of the responses from statement seven.

In response to statement seven, 40 percent of the respondents had no strong opinion. A larger percentage (34 percent) of respondents disagreed that WGL factors for FCE are sufficient incentive for capital investment than agreed (26 percent). The respondents who disagreed stated:

1. FCE factors are not comprehensive. There needs to be more of a direct link to productivity.

2. Factors had no effect on contractor capital improvements. Contracting Officers doubted if contractors even used it.

Statement 8. Profit policy is an appropriate tool for incentivizing capital investment in more productive facilities and equipment.

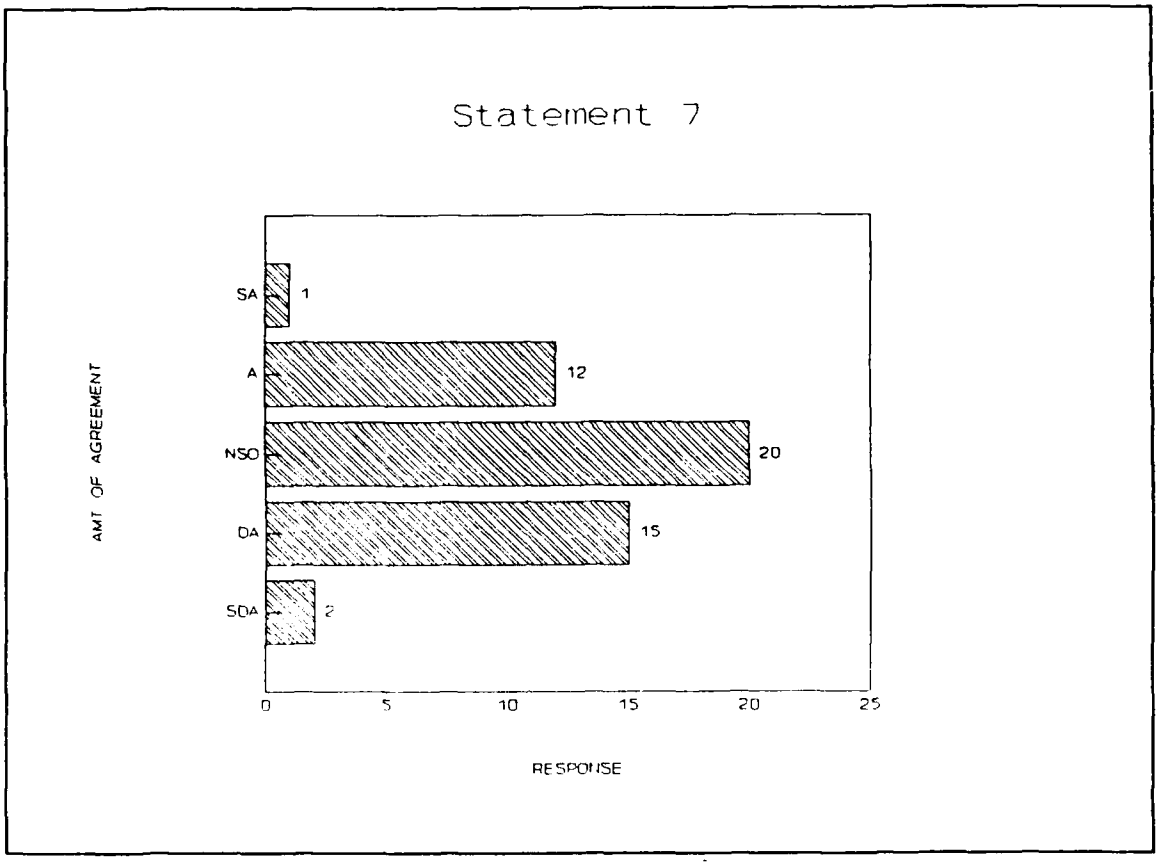


Figure 4. Statement 7 Responses

Figure 5 is the distribution of responses from statement eight.

Responses to this statement were fairly evenly split. The percentage that agreed (40 percent) responded that the WGL are one of the tools available for incentivizing capital investment. Those who disagreed (36 percent) responded the WGL were not working as intended. Other responses included:

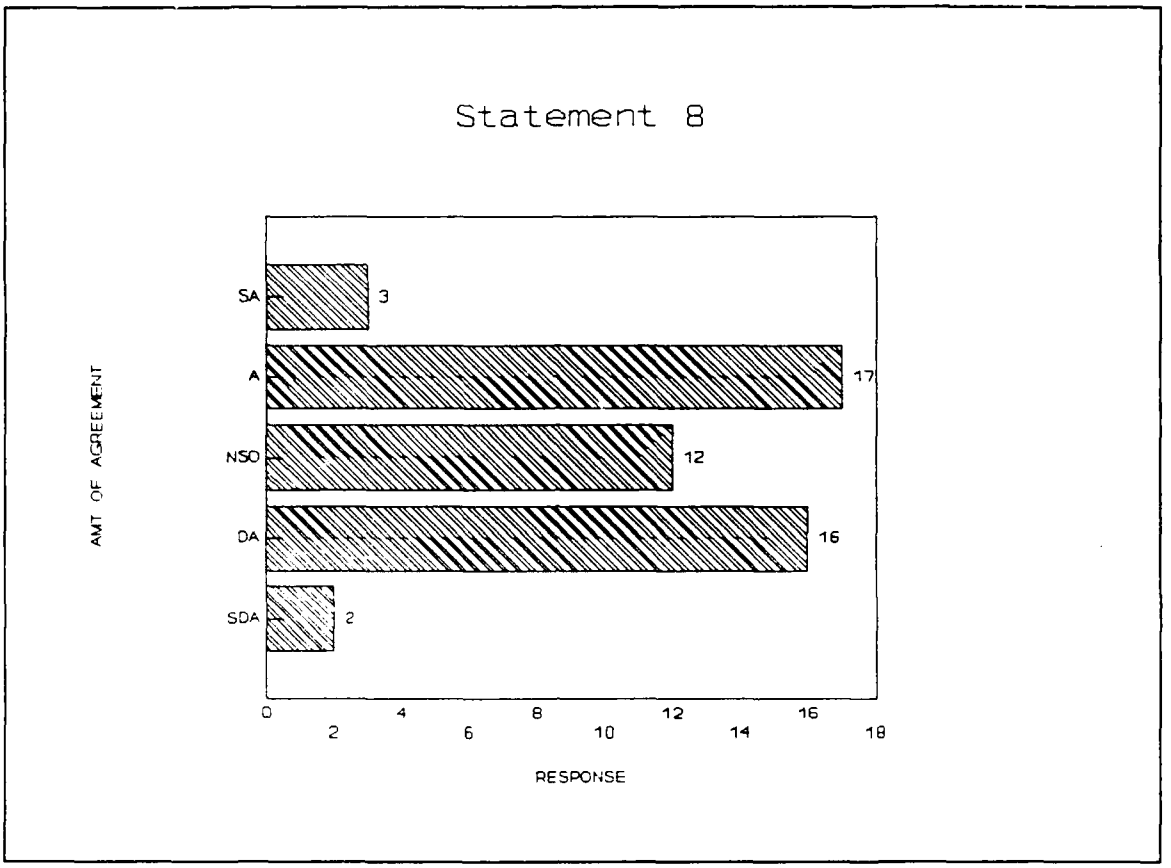


Figure 5. Statement 8 Responses

1. WGL do not provide enough incentive.

2. WGL are not considered. Contractors have a minimum ROA, ROI, that they want to receive.

A common response between those who did agree and those with no strong opinion (24 percent) were that WGL were a valuable tool but not the primary factor or incentive used for capital investment.

Statement 9. There is pressure on the Contracting Officer to keep profit down.

Figure 6 is a distribution of the responses to statement nine.

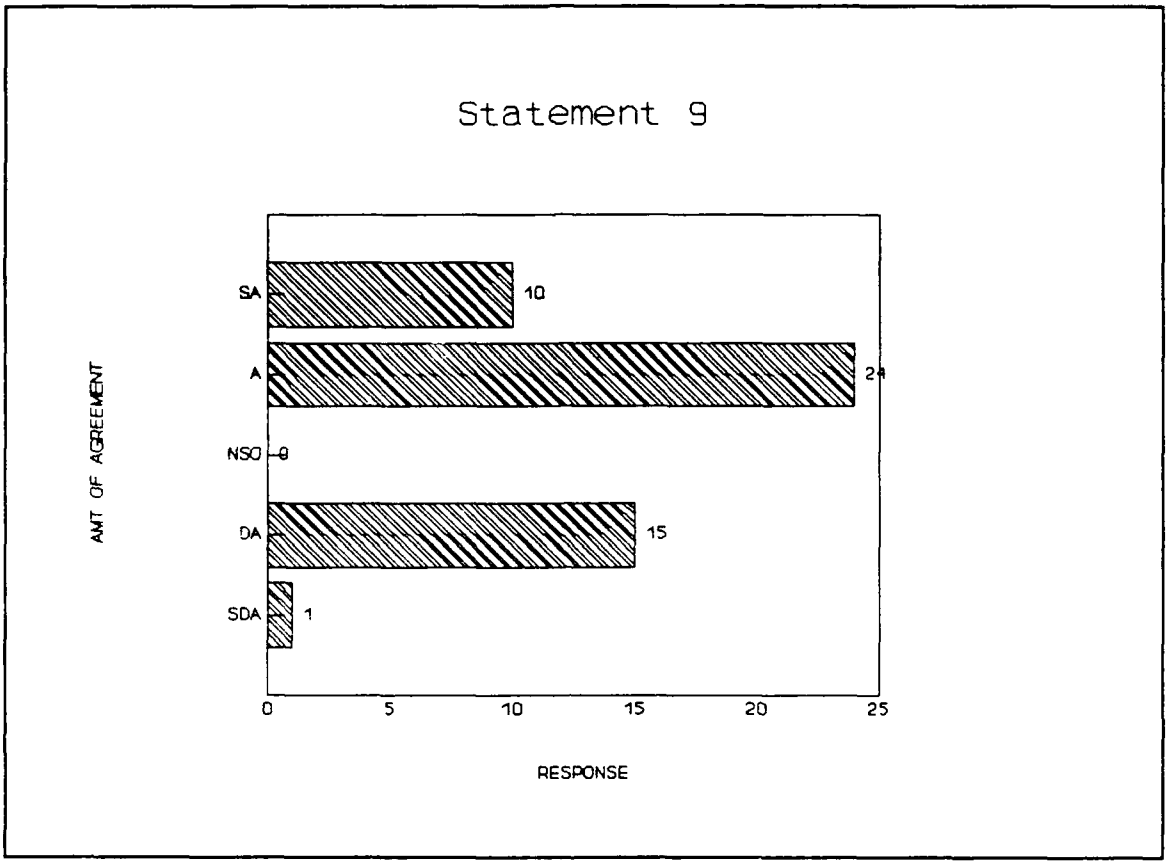


Figure 6. Statement 9 Responses

The majority of respondents (68 percent) agreed with this statement. They cited the initial one percent reduction in profit goal when the policy was started and that both the WGL formula and management pressure within the organization were to keep profit down. The percentage that

disagreed (32 percent) responded that each requirement was looked at individually and a fair and reasonable profit was given. Respondents who did disagree commented that management did have an upper limit to profit and when WGL profit/fee went above it, a greater degree of justification was required.

Statement 10. The profit/fee objective is more often determined on past averages or history than on weighted guidelines objectives.

Figure 7 is a distribution of the responses to statement ten.

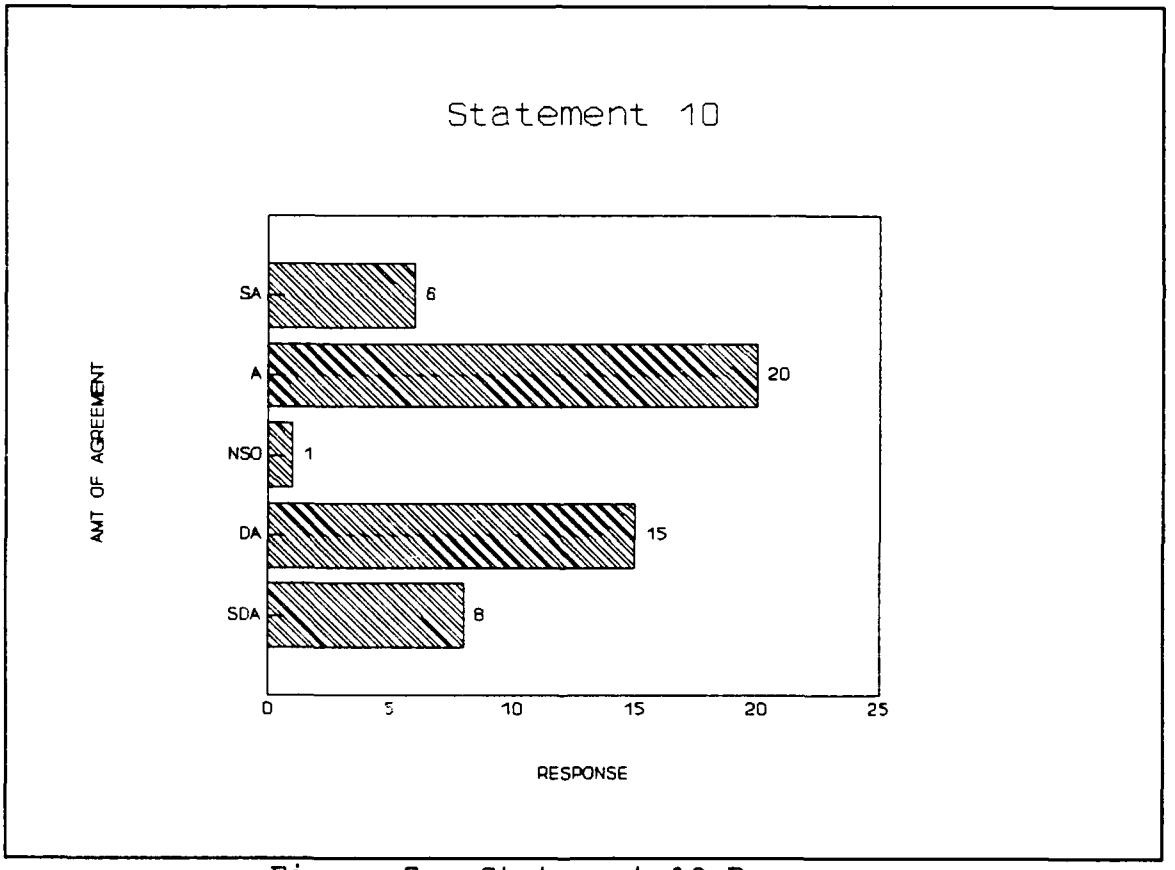


Figure 7. Statement 10 Responses

In response to this question half (50 percent) agreed that profit/fee objectives were often determined by historical rates. This was especially true for reprocurements where expectations of what was given on the last contract became the target for the next contract. Contracting Officers, given a scenario of a contractor who makes a capital investment in facilities and equipment and reduces costs, when given a WGL computation for a higher profit still maintained that the historical average would be the negotiation position. Another common response was to adjust the WGL factors to match what the historical profit level was. The respondents who disagreed (48 percent) stated that they did consider history, but only as one of the factors. The WGL were used along with personal judgement and the need to provide a fair and reasonable profit.

Statement 11. Profit/fee determinations are often made before weighted guidelines computations.

Figure 8 is a distribution of the responses to statement 11.

In response to statement 11, 70% disagreed that the profit/fee determination was made before WGL computation. Some of the responses were:

1. Contracting Officers were more accountable for doing WGL computations before negotiations.
2. WGL computations were a starting point for determining profit/fee levels.

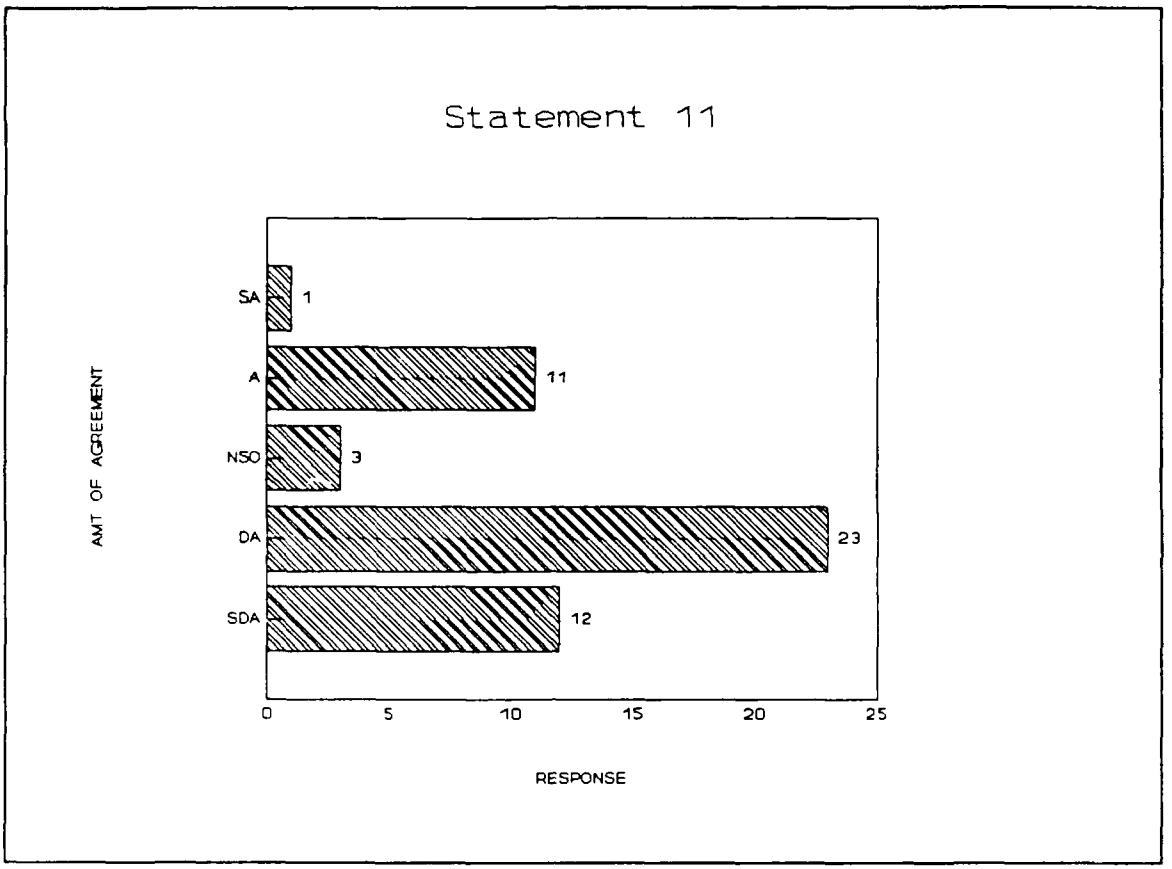


Figure 8. Statement 11 Responses

The 24 percent who agreed stated that:

1. Negotiators usually have a "gut" feel based on perceived risk of the program.

2. They hope the WGL will support what they believe is fair and reasonable.

3. The WGL were used to back into already perceived judgment of what profit should be.

When asked how defense contractors justified their profit/fee level, Government procurement personnel had a common response. Defense contractors would use degree of

risk, historical rates, and past performance to justify negotiated profit/fee levels. WGL were rarely if ever used.

Statement 12. Current profit policy emphasis on facilities capital employed has resulted in increased capital investment.

Figure 9 is a distribution of responses to statement 12.

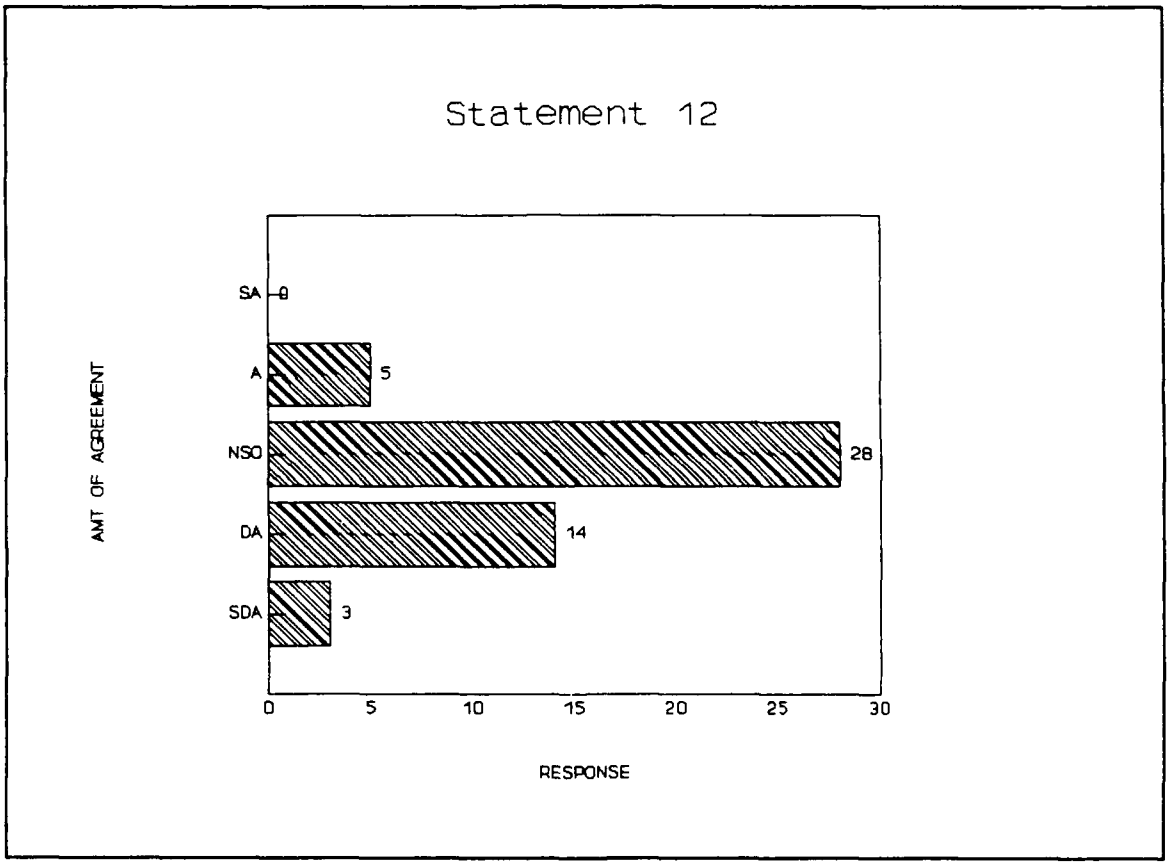


Figure 9. Statement 12 Responses

The majority (56 percent) had no strong opinion on this statement. The respondents believed they didn't have enough information to answer the statement. Those who disagreed (34 percent) stated they have not observed any increases in capital investment. They also stated that FCE was not an incentive or not enough of one to fuel capital expenditures.

Question 13. Have you noticed a change in a contractor's capital expenditures because of the productivity rewards in DoD's profit policy? Why or why not?

The majority (76 percent) of the respondents stated they had not noticed any change in a contractor's capital expenditures due to DoD's Profit Policy. The respondents stated:

1. Profit policy does not have enough impact to incentivize capital investment.
2. No correlation. Companies are investing to stay competitive or buying what is required to produce the product.
3. No change. Contractors don't believe it's a long term issue and are not about to make any capital investments because of it.
4. Increases in facilities do not equate to reduced costs.
5. No. Contractors don't believe they are going to reap savings if more productive equipment is used.

The respondents (8 percent) who had noticed capital expenditures stated that it was on a limited scale. They could only identify one, possibly two, companies that they had worked with that might have taken advantage of the new

rates. They then commented that they felt it was the exception rather than the rule.

Question 14 requested comments and recommendations on how to improve profit policy. The respondents who commented recommended:

1. A more direct link between more productive facilities and equipment is required. The IMIP and Manufacturing Technology (MANTECH) programs were mentioned as examples.

2. The use of incentives and award fees built into contracts to motivate contractors to look at productivity and cost reduction.

3. Measuring new investment vice current FCE. Make the award or fee directly proportional to investment and productivity.

4. That profit policy, financing and increasing productivity have to be better related.

D. SUMMARY

Data obtained during the researcher's interviews were presented in two sections, Defense Contractor interviews and Government Procurement Personnel interviews. The following chapter will analyze the data presented here.

V. ANALYSIS

A. INTRODUCTION

This chapter provides a managerial analysis of the data presented in Chapter IV. The analysis is conducted by grouping the data from one or more sources as it pertains to the individual research questions and issues.

While the analysis is developed around individual research questions and issues, it is important to remember that the overall objective of this study is to assess the ability of DoD's Profit Policy to incentivize defense contractors to make capital investment in more productive facilities and equipment. The analysis of the individual research questions and issues are brought together in the Findings and Conclusion section of Chapter VI.

B. INCENTIVIZING CAPITAL INVESTMENT

The purpose of this section is to determine if profit policy has acted as an incentive for capital investment in the defense industry.

A review of the literature indicates that the Government has attempted to incentivize capital investment by use of the WGL in profit policy. Section 215.970-1(c) in the DFARS, on Facilities Capital Employed, states:

> The intent of this profit factor is to encourage and reward aggressive capital investment in facilities that

> benefit DoD. This factor recognizes both the facilities capital to be employed by the contractor in the performance of the contract and the contractor's commitment to improving productivity....

DoD has attempted to promote capital investment for more productive facilities and equipment through this policy.

Nevertheless defense contractors interviewed do not consider current policy as an adequate incentive for making capital investments. Seventy-five percent responded that it provided inadequate or no incentive. An analysis of this indicated that profit policy alone does not provide the returns required to encourage capital investment. More important factors included a contractor's ability to invest, program stability, other uses for the capital to be employed and return on the risk taken.

Competitive pressure was another important factor. The emphasis on competition has limited the use of profit policy on negotiated contracts. Profit policy and its FCE incentive had little if any impact in companies with small defense segments or companies that dealt mainly with competitive awards. Companies were also incentivized to make capital investments for competitive cost reduction and competitive advantage aimed at the defense of current market share or as a strategy for market capture.

Companies whose defense work was primarily research and development or service oriented received little benefit from current policy. The alternate method used to determine

profit and the lack of capital equipment used provides little if any incentive for capital investment.

Profit policy was considered an appropriate tool to incentivize capital investment. Defense contractors also stated it was only one of a number of ways to incentivize investment, and a small one at that. The researcher observed that more important incentives included the financial health of the company, multi-year contracting, program stability and cash flow. It becomes even more of a tool in well thought through programs when there is long term commitment and procurement in economic order quantities. Companies can then make the long range plans needed to provide for better production capability. There was also considerable agreement that profit policy could become a better incentive if integrated with other financial tools such as progress payments, taxes incentives and reasonable cost sharing. This concept was also bought out in a study done by the MAC Group. It states: [Ref. 12:p. 43]

> If profit adjustments are insufficient to encourage capital market investment in the industry, the DoD will have to consider other solutions, including increasing the level of progress payments or restoring tax deferrals.

Any changes in policy to benefit from the new FCE factors would be an indicator that the policy was providing an incentive. In this respect contractors were in unanimous agreement. There has been no change to company policy to

benefit from changes in FCE factors. The inability of profit policy to provide an adequate return along with program instability, constant changes in the policy and inconsistent application of the policy severely degrades its ability to act as an incentive for a company to change its long term capital budgeting plans.

When asked how profit policy, in particular WGL, could be changed to provide an incentive a majority of contractors responded that a mechanism or adjustment of all the factors was needed so a better rate of return was assured. Again the analysis indicated a more direct link to other financing and tax incentives could help provide a stable environment conducive to capital investment.

There was also a strong response for total revision of the policy. The responses indicated that problems with inconsistent application and an emphasis on formulas and not individual requirements, or big picture thinking, kept current profit policy from being effective.

Government contracting officers were also asked to respond to statements on the ability of profit policy to act as an incentive for capital investment. Table 6 breaks out responses on this issue.

When analyzed as a single group a plurality (40 percent) had no strong opinion. A larger percentage (34 percent) disagreed that it was not a sufficient incentive than those who believed it was (26 percent). When broken down by

TABLE 6

WGL FACTORS FOR FCE PROVIDE SUFFICIENT INCENTIVE FOR CAPITAL INVESTMENT

Responses	N	Agree	No Strong Opinion	Disagree
All	(50)	26%	40%	34%
Years Exp.				
2-10	(22)	27%	50%	23%
11-33	(28)	25%	32%	43%
Contract Value				
Less than 100 M	(25)	28%	40%	32%
More than 100 M	(25)	24%	40%	36%

groups all but one group follow the trend of the overall interview. Government procurement officers with greater than ten years of defense contracting experience had a stronger disagreement on the ability of profit policy to provide an adequate incentive for capital investment. Their stronger disagreement is not a surprise. This group has participated in the different attempts by DoD to incentivize capital investment and are aware of the inability of previous profit policies to achieve this objective.

In view of the attempts DoD has made to use profit policy to incentivize capital investment the researcher asked whether it was an appropriate tool to use to incentivize capital investment. Table 7 analyzes the response to this statement.

TABLE 7

PROFIT POLICY IS AN APPROPRIATE TOOL FOR INCENTIVIZING CAPITAL INVESTMENT

Responses	N	Agree	No Strong Opinion	Disagree
All	(50)	40%	24%	36%
Years Exp.				
2-10	(22)	41%	27%	32%
11-33	(28)	40%	21%	39%
Contract Value				
Less than 100 M	(25)	28%	28%	44%
More than 100 M	(25)	52%	20%	28%

When segregating the data by contract value the high value contract group responded differently than the population as a whole. A majority (52 percent) who handle contracts over 100 million dollars agree that it's an appropriate incentive. The contracting officers who handle contracts of less than 100 million (28 percent) agreed less than the overall group. The researcher's analysis would indicate that defense contractors with higher value contracts would have a greater profit due to the FCE factor applied. Smaller contractors would not have that factor and therefore not provide the additional incentive. Government procurement personnel also responded that the concept of motivating capital investment in facilities that benefit DoD was appropriate, however they were unsure of its effectiveness. An analysis indicated that they were unable to establish a link between increased capital investment and

profit policy and in particular the factors applied to FCE. Government procurement personnel considered WGL a valuable tool. It provides a structured approach based on risk and capital employed that can be applied effectively on most contracts they administer.

Another way to evaluate profit policy as an incentive was to ask contracting officers if they have seen or evaluated an increase in capital investment due to the increased emphasis on FCE. Table 8 analyzes the responses to this issue.

TABLE 8

EMPHASIS ON FCE HAS RESULTED IN INCREASED CAPITAL EXPENDITURES

Responses	N	Agree	No Strong Opinion	Disagree
All	(50)	10%	56%	34%
Years Exp.				
2-10	(22)	18%	55%	27%
11-33	(28)	4%	57%	39%
Contract Value				
Less than 100 M	(25)	8%	60%	32%
More than 100 M	(25)	12%	52%	36%

The majority in all groups had no strong opinion on this statement. In comments received, Government procurement personnel stated they did not have enough information to answer the question. The disparity in agreement is evident in the group with defense experience. There was far less

agreement (4 percent) of personnel with greater than ten years experience then those with less than ten years (18 percent).

Finally when asked if they could correlate an increase in capital investment in more productive facilities and equipment an overwhelming majority (76 percent) responded no.

In the researcher's view capital investment is a function of a number of variables including contract award, return on investment, program stability and cash flow. Profit policy only provides a small incentive, the ability to provide an additional fee. However, when compared to the other factors it does not provide the incentive needed to provide for investment in more productive facilities and equipment.

C. CAPITAL INVESTMENT DECISION MAKING

The purpose of this section is to determine how important or what roles profit policy plays when making capital investment decisions.

The majority of contractors didn't believe profit policy played much, if any role in the decision making process. In responses to questions in the interview, on how important is DoD profit policy as a factor in deciding on capital equipment expenditures, more then 50 percent responded it was not considered at all. In fact, the main comment

received was that profit policy had virtually no direct impact on capital budget decisions. Contractors responded that a reason for this was the continuing change of DoD policies reduced any influence it might have in their company's long term budget process. Contractors responded again that profit policy could play a larger part in the process if better integrated with other financial policies.

Question 11 was asked to provide additional information on the importance of profit policy in capital investment decisions. If a company's decision to invest had been influenced by profit policy then, in the researcher's opinion, it would have some importance in the decision making process. Twenty of 22 contractors responded that profit policy had not influenced any decision to invest in capital facilities or equipment. The majority of the response generated from this question were similar to question one. The analysis indicated that the FCE factor was not considered enough of an incentive to base investment decisions on, and that a company will invest only when adequate returns can be demonstrated. It also indicated that there was an underlying belief that the increased emphasis had or could make capital investment more attractive. However, any benefits derived from the current policy were more than offset by other policies and tax laws.

D. FACTORS AFFECTING CAPITAL INVESTMENT DECISIONS

The purpose of this section is to determine what factors other than profit policy were used when making capital investment decisions.

Before determining what factors are used in capital investment decision making, the need or opportunities for capital investment was addressed. Contractors responded that they are always looking for and have the need to make capital investments. This need centered around new product generation, remaining competitive and being in compliance with current laws and regulations.

The criteria or factors used by defense contractors can be divided into two areas, financial analysis, and managerial analysis of capital expenditures. In the interviews conducted, contractors noted there was little difference in the evaluation of defense segment and commercial segment investments. All used a form of cash flow analysis such as IRR or NPV. Other financial factors such as ROA and ROI were also used.

In a managerial analysis program stability and risk were most often mentioned. Other concerns included cost effectiveness of new equipment, extent and availability of capital and the ability of the investment to make the company more competitive.

Capital investment criteria were also based on the type of investment the company needed to pursue. New or

developing programs were placed high on the capital budget. Contractual requirements for existing programs and the needs for investment in environmental or safety requirements were next. If there was a statutory requirement for health or safety investments then these would come first on the capital budget. Investments for cost reduction on existing programs was close to the bottom of the capital budget. An analysis of this indicates that any cost savings will be recouped by the Government at the next contract award and not kept by the contractor as in a commercial venture. Along with this cost reduction the contractor also receives a decline in profits. This event occurs when defense contractors deal with Government procurement personnel who base their negotiated profit levels on historical rates.

In the interviews the contractors often stated that there was a hurdle rate or expected return the company placed on capital expenditures based on the criteria in the above paragraphs. The researcher observed that when new programs were bid, the price that was submitted was based on the company's managerial analysis of what it would take to win the award. In the researcher's view this does place a difference of criteria in the decision making policy. If awards are bid and won that return less then the company's required rate then any future capital investment other than what is required to fulfill the program may not occur. Productivity improvements in defense programs that have low

returns are more likely to fall below the cut line in the capital budget when compared to commercial programs with greater rates of return.

E. PROFIT POLICY GUIDELINES

The purpose of this research area was to determine if current policy guidelines are being followed by DoD contracting personnel so that defense contractors can depend upon increased profit if productivity enhancing capital investments are made.

For any policy to be effective the people working with the policy must have the guidance and the ability to apply it. Responses to statements on guidance on the use and application of DoD profit policy and contracting officers' understanding of how to apply policy are in Tables 9 and 10 respectively.

TABLE 9

GUIDANCE ON THE USE AND APPLICATION OF DoD PROFIT POLICY IS CLEAR AND UNDERSTANDABLE

Responses	(N)	Agree	No Strong Opinion	Disagree
All	(50)	70%	12%	18%
Years Exp.				
2-10	(22)	73%	9%	18%
11-33	(28)	68%	14%	18%
Contract Value				
less than 100 M	(25)	80%	8%	12%
more than 100 M	(25)	60%	16%	24%

TABLE 10

CONTRACTING OFFICERS HAVE AN UNDERSTANDING OF HOW TO APPLY PROFIT POLICY

Responses	(N)	Agree	No Strong Opinion	Disagree
All	(50)	70%	14%	16%
Years Exp.				
2-10	(22)	73%	14%	13%
11-33	(28)	68%	14%	18%
Contract Value				
less than 100 M	(25)	76%	12%	12%
more than 100 M	(25)	64%	16%	20%

An analysis of Table 9 data indicates that the majority (70 percent) of personnel believe that the guidance on the use and application is understandable. The contract value group of over 100 million had the greatest disparity from the overall population. An analysis of Table 10 data also indicates that the majority of contracting officers have a good understanding of how to apply the WGL. Again the contract value group of over 100 million had the lowest amount of agreement. A reason for this may be that in some buying commands price analysts work-up and in some cases negotiate price and profit for contracts valued at five million dollars or more. This would effectively eliminate some of the contracting officers from dealing with the policy. Responses that contracting officers had become too reliant on price analysts and in some cases abdicated their responsibility to them support this view. On the whole, the

structure was considered adequate and provided an approach on how to arrive at a profit objective.

Contracting officers, to adequately apply FCE factors, have to have adequate information when determining what rates to apply. Table 11 provides an analyzes on the adequacy of the information provided.

TABLE 11

ADEQUATE INFORMATION IS AVAILABLE TO JUSTIFY HIGHER OR LOWER RATES WHEN DETERMINING FCE FACTORS

Responses	N	Agree	No Strong Opinion	Disagree
All	(50)	58%	12%	30%
Years Exp.				
2-10	(22)	68%	9%	23%
11-33	(28)	50%	14%	36%
Contract Value				
Less than 100 M	(25)	68%	12%	20%
More than 100 M	(25)	48%	12%	40%

A majority of respondents (58 percent) agree that there is enough information available to make the decision on the appropriate factors to apply to FCE. When broken out into years experience and contract value groups, the more experienced personnel along with the larger value contracts group still agreed but at a lower level then the overall population and other groups. The majority of respondents stated that they relied heavily on DCAA, DCAS or Service PROs to provide them with the information needed for this

decision. When asked how often they gave other than average rates (15 percent facilities, 35 percent equipment) contracting officers responded that very rarely were other than normal rates used. An analysis of this indicates that though they receive information from supporting activities and contractors, Government procurement personnel had difficulty in measuring the productivity effectiveness of FCE. Time and the ability to do research into its effectiveness were limited and kept the contracting officer from getting all the information that was needed.

Government procurement personnel were asked to respond to the statement that there is pressure to keep profits down. Table 12 outlines the responses.

TABLE 12

THERE IS PRESSURE ON THE CONTRACTING OFFICERS TO KEEP PROFITS DOWN

Responses	N	Agree Strong	No Opinion	Disagree
All	(50)	68%	0%	32%
Years Exp.				
2-10	(22)	73%	0%	27%
11-33	(28)	64%	0%	36%
Contract Value				
Less than 100 M	(25)	68%	0%	32%
More than 100 M	(25)	68%	0%	32%

As shown in Table 12, a majority (68 percent) of all respondents agreed there was pressure to keep profits down.

This pressure was from management, the WGL and the implementation of current policy when a one percent reduction in profits was recommended. The responses in the different categories also show a strong agreement to this statement. There was, however, an underlying belief that each requirement needed to be looked at individually and a "fair and reasonable" profit be given.

For WGL to be effective they have to be used in the determination of the profit/fee objective. Analysis of Tables 13 and 14 indicate how well WGL are used to derive the profit objective.

TABLE 13

THE PROFIT/FEE OBJECTIVE IS MORE OFTEN DETERMINED ON HISTORY OR PAST AVERAGES THAN WGL

Responses	N	Agree	No Strong Opinion	Disagree
All	(50)	52%	2%	46%
Years Exp.				
2-10	(22)	59%	5%	36%
11-33	(28)	46%	0%	54%
Contract Value				
Less than 100 M	(25)	56%	0%	44%
More than 100 M	(25)	48%	4%	48%

The majority of the respondents agreed (52 percent) that history or past averages more often determined the contracting officer's initial position in negotiations. When broken out by different groups the defense contractors with greater

TABLE 14

THE PROFIT/FEE OBJECTIVE IS DETERMINED BEFORE WGL COMPUTATION

Responses	N	Agree	No Strong Opinion	Disagree
All	(50)	24%	6%	70%
Years Exp.				
2-10	(22)	32%	5%	63%
11-33	(28)	18%	7%	75%
Contract Value				
Less than 100 M	(25)	16%	8%	76%
More than 100 M	(25)	32%	4%	64%

experience and higher value contract group do not use prior history as much. An analysis of this indicates that Government procurement officers with greater experience and higher value contracts use history as only one of many factors. Historical rates played a major role in reprocurements. Analysis indicates that even if a contractor was to become more productive through increased capitalization negotiations for reprocurement would be biased towards past averages or historical rates.

When Table 14 is analyzed the majority (70 percent) disagreed that the actual profit/fee was determined before WGL computations. When broken out into different groups there was still strong disagreement, ranging from 63 percent to 75 percent, on the determination of profit objectives before WGL computations. The researcher found that Government procurement personnel were using WGL to arrive at

profit objectives. They, however, found it difficult to remove themselves from using past averages or historical profit rates. If the contracting officer was in a first time negotiation then WGL played a major part in their negotiations. Business judgement and the concept of "fair and reasonable" were also used in determining the profit/fee.

An analysis of Tables 12, 13, and 14 indicates that a substantial minority of Government procurement personnel are using WGL to "back into" an expected profit level. This may be due to perceived pressure to keep profit levels down, the use of past history or the "gut feel" personnel have when they determine profit/fee levels.

An analysis of the defense contractors' opinion on this issue indicates that 41 percent believe Government negotiators are complying with policy. Of the responses 27 percent disagreed while 23 percent felt application was inconsistent. There was an overall opinion expressed by contractors in all groups that government negotiators did not move past the averages. This is consistent with the remarks and analysis of Government procurement officers' responses. The perception that profit policy is not being consistently applied or the belief that the company is not getting anything other than the average factors when it comes to FCE will keep companies from believing profit policy is an incentive for capital investment.

VI. FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

A. FINDINGS AND CONCLUSIONS

The objective of this thesis was to examine DoD's profit policy and its ability to incentivize defense contractors in making capital investment in more productive facilities and equipment. The principal findings and conclusions are from the analysis conducted in the previous chapter. They are presented by research question and provide the results of the research.

1. Has Current DoD Profit Policy Been an Incentive for Capital Investment in the Defense Industry?

Current profit policy has been ineffective in incentivizing defense contractors to invest in more productive facilities and equipment. Seventy-five percent of the defense contractors responded that it provided inadequate or no incentive. Competition, the company's financial health, program stability and adequate return on risks taken were more important factors. There was also substantial disagreement from Government procurement personnel on the ability of facilities capital employed to act as an incentive. Finally, defense contractors were in unanimous agreement that there had been no change in company policy to try to benefit from the increased incentives on FCE.

In a related finding, both contractors and a plurality (40 percent) of Government procurement personnel supported the use of profit policy as an appropriate tool to incentivize capital investment. Defense contractors stated the need for a more comprehensive policy incorporating other financial and tax incentives. Government procurement personnel were more concerned with equating additional profit to increased capitalization in more productive facilities and equipment.

In and of itself profit policy provides insufficient incentive for capital investment. Defense companies stated that what little incentive it did supply was overshadowed by other conflicting DoD and tax policies.

2. How Important is DoD Policy in Capital Investment Decision Making?

DoD Profit Policy is not an important factor when deciding on the capital budget. Over 50 percent of the defense contractors interviewed responded that it was not considered at all during the capital budgeting process. Even with the increased weights placed on FCE it was not considered incentive enough to base investment decisions on. Ninety-one percent of the contractors responded that profit policy had not influenced any decision to invest in capital facilities or equipment.

3. What Factors Other Than DoD Profit Policy Affect the Defense Industries Capital Investment Decision?

There is no single answer to this question. Each company used different factors and decision making tools to develop their capital budget. Companies generally analyze two areas: financial and managerial. Financial analysis provided expected rates of return while managerial provided program evaluation and risk assessments.

In companies with both defense and commercial segments the capital investments for both were evaluated by the same criteria or factors. Productivity improvements usually fell below other capital investment needs such as new programs, environmental and health investments and newly awarded program requirements. In companies with a large degree of commercial work, defense segment productivity improvements ended up low on the capital budgeting list. Low returns and high risk factors put these segments at a disadvantage when competing against commercial requirements.

4. Are Current Policy Guidelines Being Followed by DoD Contracting Officers So That Contractors Can Depend Upon Increased Profit if They Make Capital Expenditures?

DoD Profit Policy is not being followed as originally intended. A majority (70 percent) of Government personnel responded that WGL are computed before profit/fee determination. However, 52 percent agreed when responding to a different statement that the profit/fee objective is

more often determined by past history. The WGL were then being used to "back-in" to a profit/fee objective.

In a related finding Government procurement personnel perceived pressure to keep profit/fee levels low. This pressure was three fold. It came from management, the WGL when profit levels were perceived as too low and the recommendation to reduce profit levels by one percent when the present policy was implemented.

A contributing factor to policy ineffectiveness was the indirect link between increased FCE factors and more productive facilities and equipment. Government procurement personnel rarely used other than average rates and were reluctant to use higher factors because they were unable to associate it with increased productivity.

B. RECOMMENDATIONS

Three recommendations are offered for resolving the issues identified in the research. The second and third recommendations are similar to the ones made in Reference 4 and are still valid today.

1. The DoD should encourage the use of more direct incentives for capital investment. If it is DoD's intent to incentivize capital investment then a more direct approach needs to be initiated. A more widespread use of already existing programs such as IMIP or MANTECH can be initiated. Greater use of incentive or award fee contracts can be used or adapted to provide the direct link between productivity and the fee awarded.

2. The DoD should give more attention to the proper implementation of profit policy. This can be done by

making the major buying commands and procurement personnel more accountable in explaining how profit objectives are arrived at. Monitoring of DD form 1547 may also provide an insight on how profit policy is being implemented.

3. The DoD should review and restate the objectives of profit policy to the Services and procurement personnel. Personnel need to have a clear understanding of what is expected and required. If the objective is to just eliminate disincentives to capital investment then it should also be realized that profit policy in and of itself can not incentivize capital investment.

APPENDIX A

CURRENT DOD PROFIT POLICY

The following is an excerpt from the DoD Federal Acquisition Regulation Supplement part 215, subpart 215.9-profit.

PART 215--CONTRACTING BY NEGOTIATION
SUBPART 215.9--PROFIT

215.900 Scope of Subpart. This subpart prescribes additional policies and procedures which DoD contracting officers shall use in developing a prenegotiation profit or fee objective (hereafter collectively called "profit objective") on negotiated defense contracts.

215.902 Policy.

(a)(1)(i) The Weighted Guidelines Method described in 215.970 is DoD's structured approach for performing a profit analysis on contract actions where price is to be negotiated. Its purpose is to provide a uniform and consistent manner for rewarding risk, motivating efficient and quality performance, and stimulating capital investment in the defense industrial base. The contracting officer shall use the Weighted Guidelines Method, or an alternate structured approach as authorized in 215.902(a)(1)(ii), for any negotiated contract action that requires cost analysis (FAR 15.805-3). A profit analysis shall not be performed on contract actions to be awarded on the basis of adequate price competition (FAR 15.804-3(b)). Furthermore, practices which produce an arbitrary profit objective or accomplish a profit analysis on an after-the-fact basis are unacceptable.

(ii) The contracting officer may use an alternate structured approach, described in 215.971, in lieu of the Weighted Guidelines Method for the types of contract actions listed immediately below. The alternate structured approach must specifically address performance risk, contract type risk (including contractor working capital), and contractor facilities capital.

(A) Contract actions under $500,000;

(B) Architect-engineer contracts;

(C) Construction contracts;

(D) Contracts primarily requiring delivery of material supplied by subcontractors;

(E) Termination settlements; and

(F) Cost-plus-award-fee contracts.

(iii) Although it is intended that the Weighted Guidelines Method be applied to most negotiated contract actions, there may be unusual situations where this method may not produce a reasonable overall profit objective. An alternate structured approach may be used by the contracting officer, provided that approval has been obtained in writing from the head of the contracting activity. This approval authority may be redelegated in accordance with Departmental procedures.

(iv) The contracting officer shall use the modified Weighted Guidelines Method for contract actions with nonprofit organizations (see 215.972).

(S-70) If the contract action involves a modification to an existing contract, the contracting officer may apply the profit rate in the existing contract to the modification if all of the following conditions are met:

(1) Modification is a relatively small dollar amount;

(2) Work to be performed under the modification is similar to that required in the existing contract; and

(3) Other relevant variables have not materially changed (e.g., performance risk, interest rates, progress payment rates, distribution of facilities capital).

(S-71) The Weighted Guidelines Method shall be used to establish a basic profit rate under a formula type pricing agreement, and this basic rate may be used on all contract actions issued under that agreement, provided that conditions affecting profit do not change materially.

(S-72) The prime contractor should be encouraged to use the Weighted Guidelines Method or a similar structured approach in developing profit objectives for negotiated subcontracts.

215.903 Contracting Officer Responsibilities.

(b) The Weighted Guidelines Method of profit analysis shall not be used in instances where cost analysis is being performed to assess cost realism on competitive acquisitions.

(e) The contractor should be encouraged to present the details of proposed profit amounts in the format described in 215.970, if application of the Weighted Guidelines Method is anticipated. This will facilitate a more complete discussion of the individual factors which will determine the overall profit objective. Specific agreement on the applied weights or values for individual profit factors shall not be attempted.

(S-70) The contracting officer's price negotiation memorandum shall fully document the profit analysis performed, whether it be accomplished through the Weighted Guidelines Method or an alternate structured approach.

(S-71) The contracting officer is responsible for the accuracy and timeliness of profit reporting under DoD's management information system (see 204.673). Such reporting should be accomplished within 30 calendar days after the date of contract award. The contracting officer is responsible for the correction of any errors detected by the system's auditing processes.

215.905 Profit-Analysis Factors.

215.905-1 Common Factors. It is not necessary for the contracting officer to give consideration to the common factors beyond the means included in the Weighted Guidelines Method and alternate structured approaches.

215.970 Weighted Guidelines Method. The Weighted Guidelines Method requires application of a DD Form 1547, "Record of Weighted Guidelines Method Application" (see 253.303-70-DD-1547). This method is DoD's structured approach for (a) performing the profit analysis necessary to develop a prenegotiation objective, (b) summarizing profit amounts subsequently negotiated as part of the contract price, and (c) serving as the principal source document for reporting profit statistics through DoD's management information system. The Weighted Guidelines Method expressly takes into account the contractor's degree of performance risk in producing the goods or services being acquired, the contract type risk assumed by the contractor under varied contract and incentive arrangements, and the nature and extent of facilities capital to be employed by the contractor. A normal value and designated range have been established for each profit factor. The normal value is the expected profit assignment where average conditions exist when compared to all goods and services acquired by DoD. The contracting officer may assign any value within the designated range if conditions warrant.

215.970-1 Procedures for Establishing a Profit Objective.

(a) Performance Risk. This profit factor addresses the contractor's risk in fulfilling the contractual requirements to provide the supplies or to perform the services being acquired.

(1) Profit Base. The profit amount for performance risk is computed by multiplying a composite profit value assigned by the contracting officer times total contract costs, excluding general and administrative (G&A) expenses, contractor independent research and development/bid and proposal (IR&D/B&P) expenses, and facilities capital cost of money.

(2) Normal Values and Designated Ranges.

(i) Standard. Except for limited cases as provided in 215.970-1(a)(2)(ii), the normal value and designated range for the performance risk profit factor are as shown below. It is expected that the standard will be used on most contracts.

	Normal Value	Designated Range
Performance Risk (Standard)	4%	2% to 6%

(ii) Alternate. It is DoD's intent to base a substantive portion of total profit on contractor investment in facilities capital. However, some research and development and service contractors require relatively low capital investment in buildings and equipment when compared to the defense industry overall. For such contractors, the contracting officer may use the alternate normal value and designated range shown below. If the alternate is used, the contractor may not be given any profit for facilities capital employed (215.970-1(c)).

	Normal Value	Designated Range
Performance Risk (Alternate)	6%	4% to 8%

(3) Evaluation Criteria. Performance risk shall be evaluated using three criteria: technical, management and cost control. Each is an integral part of developing the composite profit value for performance risk. The contracting officer shall weight each criterion as judged appropriate for the supplies or services being acquired. The profit value assigned will vary according to the contractor's performance risk in providing the supplies or services required by the contract. While any value may be assigned within the designated range, it is expected that the maximum and minimum values will be restricted to cases where performance risk is substantially above or below normal. The following example demonstrates how a composite profit value for performance risk is calculated.

	Weight Assigned	Value Assigned	Weighted Value
Technical	30%	5.0%	1.5%
Management	30	4.0	1.2
Cost Control	40	4.5	1.8
Composite Value			4.5

(i) Technical. This criterion focuses on the technical risk associated with providing the goods and services being acquired. The contracting officer's evaluation should address such factors as the technology being applied or developed by the contractor, technical complexity, program maturity, performance specifications and tolerances, and delivery schedule. The contracting officer is expected to carefully review the contract requirements and focus on the critical performance elements in the statement of work or specifications. The extent of a warranty or guarantee coverage should also be considered. Conditions which might justify higher or lower values are discussed below.

(A) Above Normal Conditions. The contracting officer may assign a higher than normal value in those cases where there is substantial technical risk. The following are indicators that such a condition may exist: the contractor is either developing or applying advanced technologies; items are being manufactured using specifications with stringent tolerance limits; the efforts require highly skilled personnel or require the use of state of the art machinery; the services and analytical efforts are of utmost importance to the Government and must be performed to exacting standards; the contractor's independent development and investment has reduced the Government's risk or cost; the contractor has accepted an accelerated delivery schedule to meet DoD requirements; the contractor has assumed additional risk through warranty provisions. A maximum value may be Justified in the development or initial production of a new item, particularly if performance or quality specifications are tight, or if there is a high degree of development or production concurrency. Extremely complex, vital efforts to overcome difficult technical obstacles which require personnel with exceptional abilities, experience and professional credentials may also justify a value significantly above normal.

(B) Below Normal Conditions. The contracting officer may assign a lower than normal value in those cases where the technical risk is low. The following are indicators that such a condition may exist: off the shelf items are being acquired; relatively simple requirements are specified; there is little application of complex technology; efforts that do not require highly skilled personnel or which are relatively routine; mature programs; follow-on efforts and repetitive type procurements. A profit value significantly below normal may be justified for circumstances such as the following: routine services; production of simple items; rote entry or routine integration of government furnished information; simple operations within government owned facilities.

(ii) Management. This criterion considers the management effort involved on the part of the contractor to integrate the resources necessary to meet contract requirements. Resources include raw materials, labor, technology, information, and capital. The contracting officer should assess the contractor's management and internal control systems as well as the management involvement expected on the individual contract action. The contracting Officer should consider the degree of cost mix as an indication of the types of resources applied and value-added by the contractor. The cost elements should not, themselves, be a basis for profit assignment. In evaluating management efforts, the contracting officer should use reviews made by the field contract administration office or other pertinent

DoD field offices. The contracting officer should also give consideration to the contractor's support of federal socioeconomic programs, such as small business concerns, small business concerns owned and controlled by socially and economically disadvantaged individuals, handicapped sheltered workshops, labor surplus areas, and energy conservation. Conditions which might justify higher and lower values are discussed below.

(A) Above Normal Conditions. The contracting officer may assign a higher than normal value in those cases where the management effort is intense. The following are indicators that such a condition may exist: the value-added by the contractor is both considerable and reasonably difficult; the effort involves a high degree of integration or coordination; the contractor has a substantial record of active participation in federal socioeconomic programs. A maximum value for management may be justified under conditions such as the following: efforts requiring large scale integration of the most complex nature; major international activities requiring significant management coordination; or efforts with management milestones of critical importance.

(B) Below Normal Conditions. The contracting officer may assign a lower than normal value in those cases where the management effort is minimal. The following are indicators that such a condition may exist: a mature program where many end item deliveries have been made; the contractor adds minimum value to an item; routine efforts which require minimal supervision; the contractor provides poor quality, untimely proposals; the contractor fails to provide an adequate analysis of subcontractor costs; the contractor does not cooperate in the evaluation and negotiation of the proposal. A significantly below normal profit value may be justified if reviews performed by the field contract administration offices disclose unsatisfactory management and internal control systems (e.g., quality assurance, property control, safety, security) or if the effort requires an unusually low degree of management involvement.

(iii) Cost Control. This criterion focuses on the contractor's efforts to reduce and control costs. The principal areas for evaluation are the expected reliability of cost estimates, cost reduction initiatives, and cost control management. Other factors which bear on the contractor's ability to meet the cost targets, such as foreign currency exchange rates and inflation rates, may also be considered. The contracting officer should assess the reliability of the contractor's estimating system and the extent of the contractor's cost reduction initiatives (e.g., competition advocacy programs, dual sourcing, spare parts pricing reforms, value engineering). In evaluating

cost control management, the contracting officer should consider the adequacy of the contractor's management approach to the control of cost and schedule. Conditions which might justify higher or lower values are discussed below.

(A) Above Normal Conditions. The contracting officer may assign a higher than normal value if the contractor can demonstrate a highly effective cost control program. The following are indicators that such a condition may exist: the contractor provides fully documented and reliable cost estimates; the contractor has an aggressive cost reduction program that has demonstrable benefits; the contractor uses a high degree of subcontract competition (e.g., aggressive dual sourcing); the contractor has a proven record of cost tracking and control.

(B) Below Normal Conditions. The contracting officer may assign a lower than normal value if the contractor demonstrates minimal concern for cost control. The following are indicators that such a condition may exist: the contractor has a marginal cost estimating system; the contractor has made minimal effort to initiate cost reduction programs; the contractor's cost proposal is inadequate; or the contractor has a record of cost overruns or other indications of unreliable cost estimates and lack of cost control.

(b) Contract Type Risk. This factor focuses on the degree of cost risk accepted by the contractor under varying contract types.

(1) Profit Base. The amount of profit for contract type risk is computed by multiplying the value assigned by the contracting officer times total allowable costs excluding GSA expenses, IR&D/B&P expenses, and facilities capital cost of money.

(2) Normal Values and Designated Ranges.

(i) The following normal values and designated ranges are applicable to contracts that contain no provisions or limited (first article financing) provisions for progress payments:

Contract Type	Normal Value	Designated Range
Firm fixed-price	5%	4% to 6%
Fixed-price-incentive	3%	2% to 4%
Cost-plus-incentive fee	1%	0% to 2%
Cost-plus-fixed-fee	.5%	0% to 1%

(ii) For fixed-price type contracts that contain provisions for progress payments, the normal value and designated ranges shown below shall be used. The value assigned by the contracting officer shall be further adjusted by adding an amount to recognize the contractor's

investment in working capital, as described in 215.970-1(b)(4).

Contract Type	Normal Value*	Designated Range*
Firm fixed-price	3%	2% to 4%
Fixed-price-incentive	1%	0% to 2%

* Add working capital adjustment to value assigned

(iii) Time and material contracts; labor-hour contracts; overhaul contracts priced on a time and material basis; and firm fixed-price-level-of-effort-term contracts shall be considered to be cost-plus-fixed-fee contracts for the purpose of establishing a profit value for contract type risk and shall not receive the working capital adjustment described in 215.970-1(b)(4). However, higher profit values within the designated range may be justified to the extent that portions of cost are fixed.

(iv) Fixed-price contracts with redeterminable provisions should be considered as a fixed-price-incentive contract with below normal conditions.

(v) In determining contract type risk, it is appropriate to consider additional risks associated with contracts for foreign military sales (FMS) which are not funded by United States appropriations. For example, a contract containing an offset arrangement with the foreign country may expose the contractor to additional risk. The contracting officer may recognize additional risk if the contractor can demonstrate that there are substantial risks above those normally present in DoD contracts for similar items. If an additional risk factor is recognized, the total profit factor for cost risk shall not exceed the designated range limits established for each contract type. The additional assigned value for contract type shall not apply to FMS sales made by United States Government inventories or stocks nor to acquisitions made under DoD cooperative logistics support arrangements.

(3) Evaluation Criteria.

(i) When assigning a profit value, the contracting officer should consider elements that affect contract type risk such as: length of contract; adequacy of cost data for projections; economic environment; nature and extent of subcontracted activity; protection provided to the contractor under contract provisions (e.g., Economic Price Adjustment clauses); the ceilings and share lines contained in incentive provisions. Conditions which might justify higher or lower values are discussed immediately below.

(A) Above Normal Conditions. The contracting officer may assign a higher than normal value in those cases where there is substantial contract type risk. The following are

indicators that such a condition may exist: efforts where there is minimal cost history; long-term contracts without provisions protecting the contractor, particularly when there is considerable economic uncertainty; if the contract includes incentive provisions (e.g., cost and performance incentives) which place a high degree of risk on the contractor.

(B) Below Normal Conditions. The contracting officer may assign a lower than normal value in cases where contract type risk is low. The following are indicators that such conditions may exist: contracts involving a very mature product line with extensive cost history; relatively short-term contracts; contracts that contain provisions that substantially reduce the contractor's risk; the contract includes incentive provisions which place a low degree of risk on the contractor. Considerations regarding contract type risk on incurred costs are separately discussed below.

(ii) The contracting officer's assessment of contract type risk shall address the extent that costs have been incurred prior to definitization of the contract action (see also 217.7503(b) (8)). This assessment shall include any reduced contractor risk on both (A) the contract before definitization and (B) the remaining portion of the contract. The contracting officer should generally regard the contract type risk to be below normal within the designated range of the contract type. However, in cases where a substantial portion of the costs have been incurred prior to definitization, the contracting officer may assign a value as low as 0% for contract type risk, regardless of contract type. The contracting officer's risk assessment may consider the limitations placed on the contractor for the period prior to definitization.

(4) Working Capital Adjustment (Maximum Value 4%). For fixed-price type contracts that contain provisions for progress payments, the contracting officer shall calculate a working capital adjustment. This adjustment is added to the contract type risk and it shall not exceed 4% of contract costs. Although the working capital adjustment employs a formula approach, the intent is only to give general recognition to the contractor's cost of working capital under varying contract circumstances, financing policies and the economic environment. It is not intended to be an exact calculation of such costs. The formula is discussed below.

Contract Costs
Multiply by Portion Financed by Contractor
Contract Costs Financed by Contractor
Multiply by Contract Length Factor
Working Capital Investment
Multiply by Interest Rate
Working Capital Adjustment

(i) Contract Costs. This represents all allowable costs, including contractor GSA expenses and IR&D/B&P expenses (but not facilities capital cost of money). The contracting officer may adjust this amount where the contractor has a minimum cash investment (e.g., subcontractor progress payments liquidated late in period of performance). The contracting officer should also consider the degree which some costs are covered by special financing provisions, such as advance payments, and special funding arrangements on multi-year contracts.

(ii) Portion Financed by Contractor. The contractor's share of financing is generally the portion not covered by progress payments. Typically, this will be 100% minus the customary progress payment rate (FAR 32.501-1). For example, if the contract provides for progress payments at 75%, then the contractor's share of financing would be 25% (100% minus 75%). On contracts that provide progress payments to small businesses or flexible progress payments (252.232-7004), the contractor's share shall be computed using the customary progress payment rate for large businesses.

(iii) Contract Costs Financed by Contractor. Multiply contract costs by portion financed by contractor.

(iv) Contract Length Factor. This factor represents the period of time that the contractor has a working capital investment in the contract. It is to be based on the time necessary for the contractor to complete the substantive portion of the work. The contract length factor is not necessarily the period of time between contract award and final delivery (or final payment), as periods of minimal effort should be excluded. It also should not include periods of performance contained in option provisions. The contracting officer should use the table below to establish the contract length factor. On contracts with multiple deliveries, the contracting officer should develop a weighted average contract length. Sampling techniques are permissible, so long as they provide a representative result.

Period to Perform Substantive Portion	Factor
21 months or less	.40
22 to 27 months	.65
28 to 33 months	.90
34 to 39 months	1.15
40 to 45 months	1.40
46 to 51 months	1.65
52 to 57 months	1.90
58 to 63 months	2.15
64 to 69 months	2.40

70 to 75 months	2.65
76 months or more	2.90

(v) Working Capital Investment. Multiply the contract costs financed by contractor by the contract length factor.

(vi) Interest Rate. The contracting officer shall use the interest rate promulgated by the Secretary of the Treasury (230.7003(c)). No other interest rate is authorized.

(vii) Working Capital Adjustment. Multiply the working capital investment by the interest rate. The result is the working capital adjustment. It may not exceed 4% of contract costs.

EXAMPLE

JIC Manufacturing is to be awarded a negotiated contract for four assemblies. The contracting officer's prenegotiation cost objective for each is $500,000. The period of performance is 40 months with assemblies being delivered in the 34th, 36th, 38th, and 40th month of the contract (average period is 37 months). JIC Manufacturing will receive progress payments at 75% (contractor portion is 25%), and the current interest rate is 8%.

Contract Costs	$2,000,000
Portion Financed by Contractor	25%
Costs Financed by Contrac	$ 500,000
Contract Length Factor	1.15
Working Capital Investment	$ 575,000
Interest Rate	8%
Working Capital Adjustment	$ 46,000*

* Equates to 2.3% profit on total costs

(c) Facilities Capital Employed. The intent of this profit factor is to encourage and reward aggressive capital investment in facilities that benefit DoD. This factor recognizes both the facilities capital to be employed by the contractor in the performance of the contract and the contractor's commitment to improving productivity. The amount of recognition is differentiated among asset categories in proportion to the potential for productivity increases. In addition to the net book value of facilities capital employed, the contracting officer may consider facilities capital that is part of a formal investment plan if the contractor submits reasonable evidence that (i) achievable benefits to DoD will result from the investment, and (ii) the benefits of the investment are included in the forward pricing structure.

(1) Profit Base. The profit amount for facilities capital employed is computed by multiplying the values assigned times the allocated facilities capital attributable to buildings and equipment, as derived in DD Form 1861, "Contract Facilities Capital Cost of Money" (see 230.7004).

(2) Normal Values and Designated Ranges.

(i) Except as provided in 215.970-1(c)(2)(ii), the normal values and designated ranges for land, buildings, and equipment are as shown below.

Asset Type	Normal Value	Designated Range
Land	0%	N/A
Buildings	15%	10% to 20%
Equipment	35%	20% to 50%

(ii) It is recognized that the method used to allocate facilities capital cost of money may produce disproportionate allocation of assets to research and development and services efforts which are being provided to the government by highly facilitized manufacturing firms. In such cases the contracting officer should use the alternate normal values and designated ranges shown below.

Asset Type	Normal Value	Designated Range
Land	0%	N/A
Buildings	5%	0% to 10%
Equipment	20%	15% to 25%

(iii) If the contracting officer selected the alternate for performance risk (215.970-1(a)(2)(ii)), no profit for facilities capital employed may be assigned.

(3) Evaluation Criteria. The contracting officer's assessment should relate the usefulness of the facilities capital to the goods or services being acquired under the individual contract action, as well as to the broader perspective of defense programs. The contracting officer may assign any appropriate profit value within the designated range. It is expected that the maximum values will be restricted to those cases where the benefits of the facilities capital investment are substantially above normal. The contracting officer should analyze the productivity improvements and other anticipated industrial base enhancing benefits resulting from the facilities capital investment. The assessment should consider the economic value of the facilities capital, such as physical age, undepreciated value, idleness, and expected contribution to future defense needs. The contractor's level of investment in defense related facilities as compared with the portion of the contractor's business which

is derived from DoD may be a useful indicator for the contracting officer in evaluating the contractor's commitment to improving the productivity of defense program efforts. The contracting officer should consider any special protection provisions that may be included in the contract which reduce the contractor's risk of investment recovery (termination protection clauses, capital investment indemnification, productivity saving rewards (215.872)). Conditions which might justify higher or lower values are discussed below.

(i) Above Normal Conditions. The contracting officer may assign a higher than normal value if the facilities capital investment has direct and identifiable benefits which are considered exceptional. The following are indicators that such a condition may exist: new investments in state-of-the-art technology which reduce acquisition costs or yield other tangible benefits such as improved product quality or accelerated deliveries; investments in new equipment for research and development applications; or the contractor can demonstrate that the investments are over and above the normal capital investments necessary to support anticipated requirements of DoD programs. A value significantly above normal may be justified when there are direct and measurable benefits in efficiency and significantly reduced acquisition costs on the effort being priced.

(ii) Below Normal Conditions. The contracting officer may assign a lower than normal value if the facilities capital investment has little benefit to DoD. The following are indicators that such a condition may exist: allocations of capital which are predominantly applied to commercial product lines; furniture and fixtures, home or group level administrative offices, corporate aircraft and hangars, gymnasiums; old facilities or extensive idle facilities. A value significantly below normal may be justified when a significant portion of defense manufacturing is done in an environment characterized by outdated, inefficient, and labor-intensive capital equipment.

(iii) The contracting officer shall ensure that increases in facilities capital investments are not merely asset revaluations attributable to mergers, stock transfers, take-overs, sales of corporate entities, or similar actions.

215.970-2 Instructions for Completing DD Form 1547. The DD Form 1547 not only assists the contracting officer in establishing a profit objective under the Weighted Guidelines Method, but it also serves as the principal source document for reporting profit statistics to DoD's management information system. It is essential that this form be prepared accurately.

(a) General Guidance. The items contained on the DD Form 1547 shall be completed as shown below. All amounts are those related to the price of the contract action without regard to funding status (e.g., amounts obligated). Option amounts for additional quantities shall be handled as a separate contract action when exercised. Items marked with an asterisk (*) do not have to be completed by the contracting officer if exempted from the profit reporting requirement (204.673-3). In some cases, the information required will be identical to information provided on the related DD Form 350, "Individual Contracting Action Report."

(1) Item 1 - Report Number *. Each field contracting office designated for profit reporting shall establish a control system for consecutively numbering completed DD Forms 1547. A number does not have to be assigned until contract negotiations have been completed. This number is intended to identify the specific DD Form 1547 in DoD's management information system and will be used for follow-up actions. The control number shall be four-digits starting with 0001 at the beginning of each fiscal year. The four-digit number shall be followed by a dash and the last two digits of the fiscal year (e.g., 0004-87 for 4th action in fiscal year 1987). Numbers less than 1000 shall still be assigned four digits (e.g., 0004, 0055, 0123).

(2) Item 2 - Basic Procurement Instrument Identification No. (PIIN). This is a four-part designation in the manner prescribed in 4.671-5(b)(1) for completing DD Form 350. The parts are as follows:

Subitem A - Purchasing Office;
Subitem B - Fiscal Year (FY);
Subitem C - Type procurement Instrument Code (TPIC); and
Subitem D - Procurement Instrument Serial Number (PRISN).

(3) Item 3 - Supplemental Procurement Instrument Identification No. (SPIIN). Enter supplemental agreement or other modification number in the manner prescribed for the DD Form 350 in 204.671-5(b)(2).

(4) Item 4 - Date of Action *. Enter the date when the price of the contract action was negotiated in the following manner:

Subitem A - Year: Use last two digits (e.g., 87 for 1987)
Subitem B - Month: Use two digit number (e.g., 03 for March)

(5) Item 5 - Contracting Office Code *. Enter the code assigned to the contracting office in accordance with DoD Procurement Coding Manual, Volume 3.

(6) Item 6 - Name of Contractor *. Enter the name of the contractor (including division name) in manner prescribed for the DD Form 350 in 204.671-5(b)(5).

(7) Item 7 - Data Universal Numbering System (DUNS) Number Enter number in the manner prescribed for the DD Form 350 in 204.671-5(b)(4)(i).

(8) Item 8 - Federal Supply Code *. Enter the appropriate Federal Supply Class or Service Code in accordance with instructions shown in 204.671-5(b)(8)(i).

(9) Item 9 - DoD Claimant Program *. Enter the code in the manner prescribed for the DD Form 350 in 204.671-5(b)(8)(ii).

(10) Item 10 - Type of Contract Code *. Enter the appropriate code as follows:

Description	Code
FPR (all types)	A
FPI (all types)	L
FFP	J
FP(E)	K
CPAF	R
CPFF	U
CPIF (all types)	V

(11) Item 11 - Type Effort *. Enter the appropriate code as follows:

Description	Code
Manufacturing	1
Research and Development	2
Services	3

(12) Item 12 - Use Code *. Enter the appropriate code for use of the Weighted Guidelines Method as follows:

Description	Code
Alternate Performance Risk	1
Standard Facilities Capital Employed	2
Alternate Facilities Capital Employed	3
Alternate Structured Approach	4
Modified Weighted Guidelines Method	5

(13) Items 13 thru 20 - Cost Category. Enter the dollar values of the prenegotiation objectives for each cost category. All dollar values shall be expressed to nearest whole value (e.g., $200,008.55 = $200,009). The amount for G&A expenses in Item 19 shall also include contractor IR&D/B&P expenses.

(14) Items 21 thru 29 - Weighted Guidelines Profit Factors. Enter dollar values, factors, and percentages in spaces provided. All dollar values shall be expressed to nearest whole value (e.g., $200,008.55 = $200,009). The contract length factor and all percentages shall be

expressed to nearest hundredth (e.g., contract length factor = 1.65 or interest rate = 8.25%).

(15) Total Profit Objective. Enter the total of items 24, 25, 26, 28, 29.

(16) Items 31 thru 35 - Negotiation Summary. Enter dollar values and percentages as indicated. All dollar values shall be expressed to nearest whole value (e.g., $200,008.55 = $200,009). Percentages shall be expressed to nearest hundredth (e.g., profit rate = 10.25%).

(17) Items 36 thru 39 - Contracting Officer Approval. All forms shall be signed by the contracting officer. Include complete commercial telephone number (e.g., area code) so that follow-up actions can be accomplished quickly.

(18) Items 96 thru 99 - Optional Use. These blocks have been reserved for optional use by Military Services and Agencies.

(b) Special Guidance.

(1) While it is recognized that fixed-price type contract actions are negotiated on the basis of total price, the negotiation summary portion of the DD Form 1547 shall be prepared showing the contracting officer's best estimates of cost and profit.

(2) Where multiple profit rates apply to a single negotiation, a consolidated DD Form 1547 shall be prepared.

(3) The profit analysis for indefinite delivery-type contracts is generally based on the annual requirements. If the annual requirement is expected to exceed $500,000, a DD Form 1547 summarizing cost and profit estimates for the annual requirement shall be submitted.

215.971 Alternate Approaches to Weighted Guidelines Method. As provided in 215.902(a)(1)(ii) and (iii), alternate structured approaches may be used in lieu of the Weighted Guidelines Method. The contracting officer shall adhere to the provisions on profit factors and offset policy described below. See also guidance on cost-plus-award-fee contracts in 215.973.

215.971-1 Recognized Profit Factors. The basic structure of the Weighted Guidelines Method establishes a uniform approach for examining the three components of profit: performance risk, contract type risk (including working capital), and facilities capital employed. Alternate approaches should also consider these factors using the general principles described in 215.970.

215.971-2 Offset Policy for Facilities Capital Cost of Money. The values of the profit factors used in the Weighted Guidelines Method have been adjusted to recognize the shift in facilities capital cost of money from an element of profit to an element of contract cost (FAR

31.205-10). Reductions have been made directly to the profit factors for performance risk. In order to assure that this policy is applied to all DoD contracts which allow facilities capital cost of money, similar adjustments shall be made to contracts which use alternate structured approaches. Therefore, the contracting officer shall reduce the overall prenegotiation profit objective derived from alternate structured approaches by 1% of total cost or the amount of facilities capital cost of money, whichever is less.

215.971-3 Instructions for Completing DD Form 1547. For all selected field contracting offices identified in 204.673-3, the contracting officer shall report Items I through 12 and 31 through 39 on all contract actions of $500,000 or more. A DD Form 1547 is necessary, even where an alternate structured approach is used because it is the principal source document for DoD's management information system on profit. Profit amounts in the negotiation summary shall be net of offset for facilities capital cost of money (215.971-2). Only the base fee shall be reported on cost-plus-award-fee contracts.

215.972 Modified Weighted Guidelines Method for Nonprofit Organizations.

215.972-1 Procedures for Establishing Fee Objectives. It is DoD's policy to establish the fee objective on defense contracts with nonprofit organizations in a manner that will stimulate efficient contract performance. To achieve this, the contracting officer shall use the Modified Weighted Guidelines Method described below. For purposes of applying this method, a nonprofit organization is a business entity which operates exclusively for charitable, scientific, or educational purposes; whose earnings do not benefit any private shareholder or individual; whose activities do not involve influencing legislation or political campaigning for any candidate for public office; and is exempted from Federal income taxation under Section 501 of the Internal Revenue Code.

(a) The contracting officer shall use the guidelines described in 215.970 but make the following adjustments to the fee objective:

(1) If the standard performance risk factor is used (215.970-1(a)(2)(i)), the fee objective shall be reduced by an amount equal to 1% of total costs, <u>excluding</u> G&A expenses, IR&D/B&P expenses, and facilities capital cost of money. If the alternate performance risk factor is used (215.970-1(a)(2)(ii)), then the reduction shall be 2%.

(2) The designated range for the contract type risk shall be -1% to 0% of total costs, <u>excluding</u> GSA expenses,

IR&D/B&P expenses, facilities capital cost of money, for a cost-plus-fixed-fee contract with nonprofit organizations or elements that have been identified by the Secretary of Defense or Secretary of a Department, or their designees, as receiving sustaining support on a cost-plus-fixed-fee basis from a particular Department or Agency of the Department of Defense.

(b) In addition to the fee amounts computed in 215.972-1(a) above, the contracting officer shall consider the need for fee on contracts to be awarded to a nonprofit organization designated as a Federally Funded Research and Development Center (FFRDC). Such consideration shall include the FFRDC's proportion of retained earnings, as established under generally accepted accounting methods, that is relatable to DoD contracted effort. The need for fee may be based on the FFRDC's facilities capital acquisition plans, working capital funding as assessed on operating cycle cash needs, contingency funding, and provision for funding unreimbursed costs deemed ordinary and necessary to the FFRDC.

215.972-2 Instructions for Completing DD Form 1547. A DD Form 1547 shall be prepared on all contract actions using the Modified Weighted Guidelines Method if the applicability criteria specified for structured approaches in 215.902 are met. The instructions contained in 215.970-2 should be applied. Fee amounts included in the negotiation summary shall be net of offsets and need for fee considerations.

215.973 Cost-Plus-Award-Fee Contracts. The policies and procedures for establishing fee provisions on cost-plus-award-fee contracts are contained in FAR 16.404-2. Although these procedures prohibit application of the Weighted Guidelines Method to costplus-award-fee contracts, and similarly the general guidance on alternate structured approaches contained in 215.971-1, the offset policy for facilities capital cost of money shall apply. Therefore, the contracting officer shall reduce the base fee on cost-plus-award-fee contracts by the lesser of (a) 1% of total costs; or (b) the amount of facilities capital cost of money.

APPENDIX B

DOD PROFIT POLICY INDUSTRY SURVEY

Please make appropriate responses to the questions below. I am interested in your views on how the questions apply to your company.

1. Does current DoD profit policy provide adequate incentive for capital expenditures on equipment and facilities?

2. Is profit policy the appropriate tool for incentivizing capital investment?

3. Have there been any changes in company policy to benefit from the higher values now applied to facilities capital employed?

4. Are there opportunities or needs to make capital investment decisions at this time?

5. For defense contracts, what criteria/factors does your company consider prior to making capital expenditures in facilities and equipment.

6. What differences, if any, are there in capital investment decisions between defense and commercial segments?

7. How important is DoD profit policy as a factor in deciding on expenditures on capital equipment?

8. Does your company use DoD's weighted guidelines to substantiate your profit/fee objectives on negotiated contracts? If not, what determines negotiated profit/fee levels?

9. How can profit policy, in particular the weighted guidelines, be changed/modified to provide an incentive for investing in capital facilities and equipment?

10. In your opinion, are Government negotiators applying the weighted guideline factors to facilities capital employed in accordance with DoD profit policy.

11. Has DoD's decision to emphasize investment in facilities capital employed influenced your company's decision to invest in capital facilities and equipment?

APPENDIX C

GOVERNMENT PROCUREMENT PERSONNEL PROFIT POLICY SURVEY

Background Questions

1. What is your current position:
   PCO _____
   Contract Negotiator _____

2. How many years experience do you have in defense contracting? _____

3. What average dollar value contracts do you normally deal with?

Less than	1 million	1
Between	1 and 25 million	2
Between	25 and 50 million	3
Between	50 and 100 million	4
Over	100 million	5

Profit Policy Questions

Please indicate the extent of your agreement or disagreement for each of the following statements. Use the scale below and record your answer in the space provided.

1	2	3	4	5
strongly agree	agree	no strong opinion	disagree	strongly disagree

4. _____ Guidance on the use and application of DoD profit policy is clear and understandable.

5. _____ Contracting Officers have a good understanding of how to apply the weighted guidelines.

6. _____ Contracting Officers have adequate information available to justify higher or lower rates when determining the weighted guideline facilities capital employed factors.

7. _____ The weighted guideline factors for facilities capital employed are sufficient in providing an incentive for capital investment.

8. _____ Profit policy is an appropriate tool for incentivizing capital investment in more productive facilities and equipment.

9. _____ There is pressure on the contracting officers to keep profits down.

10. _____ The profit/fee objective is more often determined on past averages or history than on weighted guideline objectives.

11. _____ Profit/fee determinations are often made before the weighted guideline computations.

12. _____ Current profit policy emphasis on facilities capital employed has resulted in increased capital investment.

13. Have you noticed a change in a contractors capital expenditures because of the increased incentives in facilities capital employed in DoDs profit policy? Why or why not.

14. If you have any other comments on profit policy as an incentive for capital investment or its implementation what would they be.

APPENDIX D

DEFENSE CONTRACTORS

McDonnell Douglas	Westinghouse Electric
General Dynamics	Rockwell International
General Electric	Honeywell
Tenneco	Textron
Raytheon	Unisys
Martin Marietta	TRW
Lockheed	Texas Instruments
General Motors Hughes Elec	IBM
United Technologies	LTV
Boeing	ITT
Grumman	FMC
Litton Industries	Ford Motor Co.
Allied-Signal	

Source: [Ref. 15:p. 15]

APPENDIX E

SERVICE PROCUREMENT ORGANIZATIONS CONTACTED

ARMY

U.S. Army Communications and Electronics Command
Fort Mommouth, New Jersey

U.S. Army Tank-Automotive Command
Warren, Michigan

U.S. Army Aviation System Command
St.Louis, Missouri

NAVY

Naval Sea Systems Command
Washington, D.C.

Naval Air Systems Command
Washington, D.C.

Space and Naval Warfare Systems Command
Washington, D.C.

AIR FORCE

Aeronautical Systems Division
Air Force Systems Command
Wright-Patterson AFB, Ohio

Elecronic Systems Division
Air Force Systems Command
Hanscom AFB, Massachusetts

Balistic Systems Office
Air Force Systems Command
Norton Air Force Base
San Bernardino, California

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